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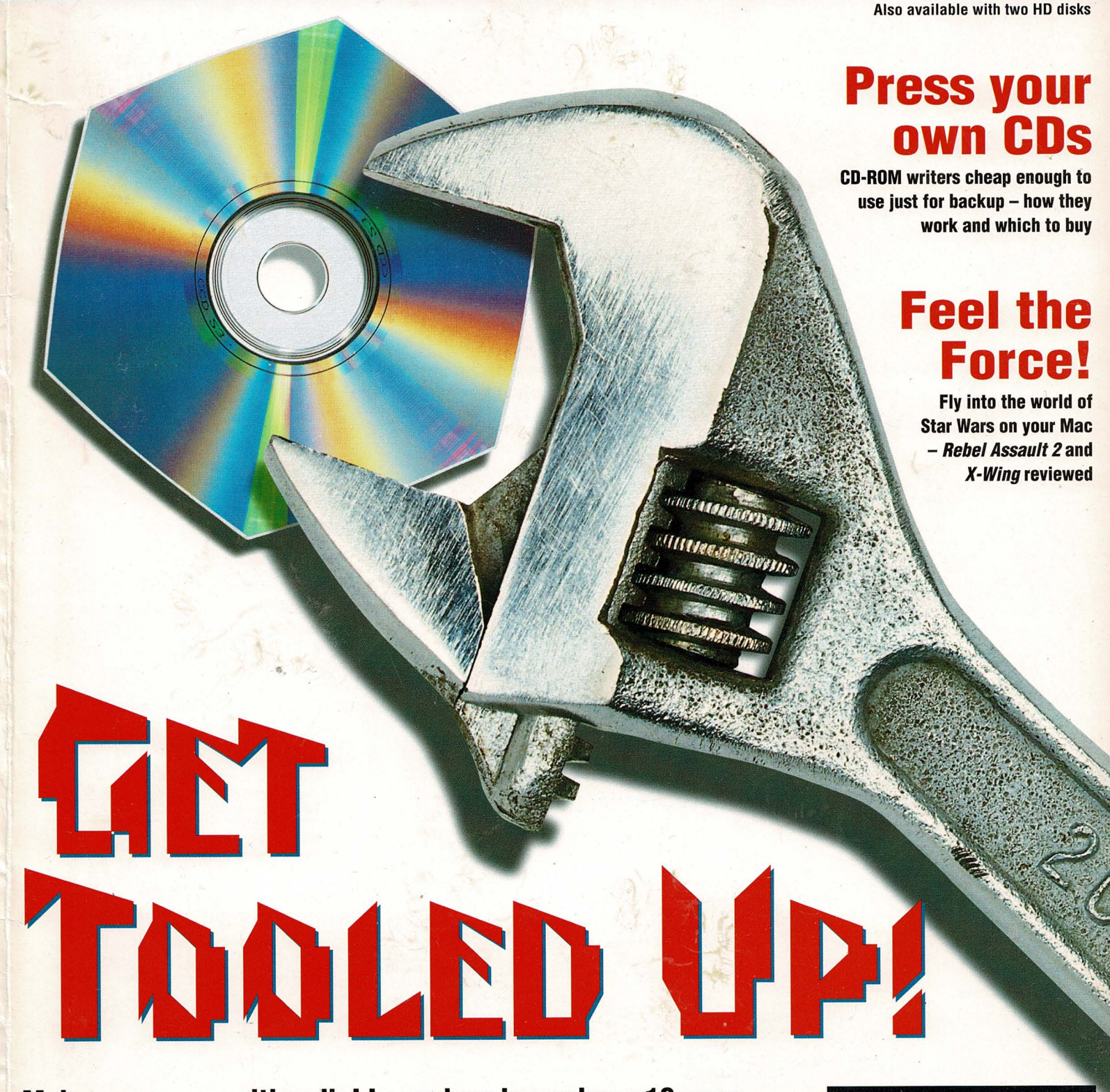

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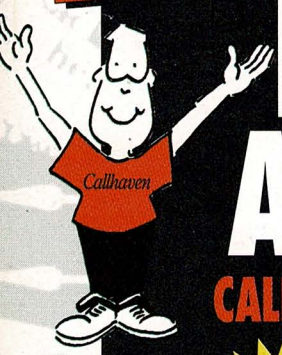

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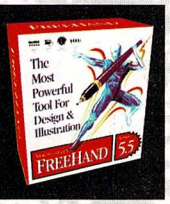

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MACFORMAT

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The Finder

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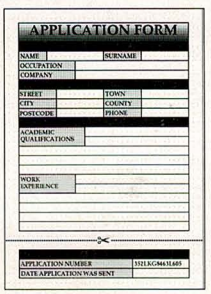

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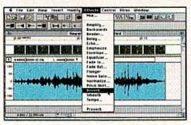

Multimedia is not just about images – if the sound's shoddy, then the film's a flop. This powerful multimedia audio tool can create, edit and sync your soundtrack – can it transform your creations?

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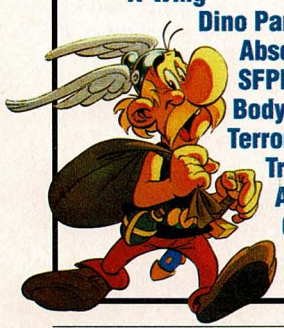

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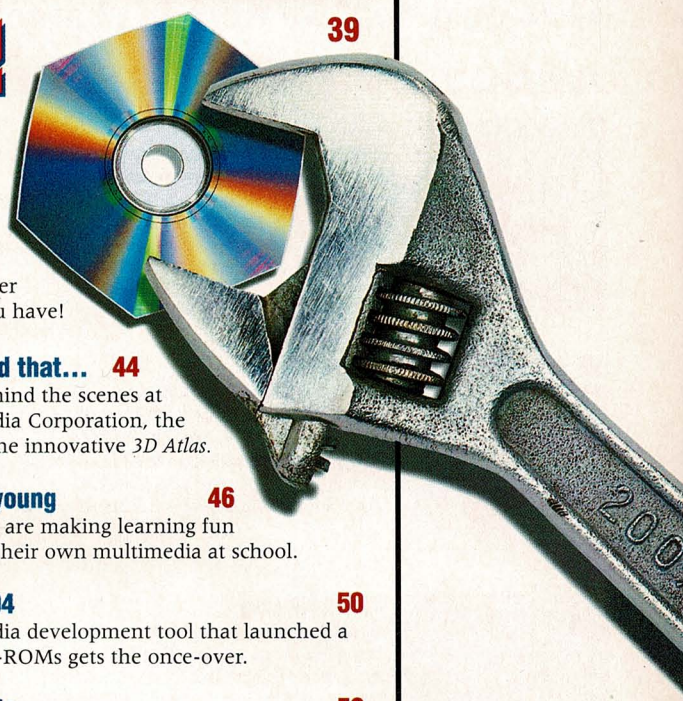

YOUR COVER DISKS

This issue, MACFORMAT comes with a choice of two CD-ROMs or two high-density floppy disks:

Your CD-ROMs 8
Nine multimedia authoring packages, including *Apple Media Tool* and demos of *Director 4*, *Astound* and *The Digital Chisel;* exclusive textures and sound resources; 25 sample high-res images from Corel; demos of *FA-18 2.0*, *HoTMetaL 2*, *3d-Active* and more, plus everything below...

Your Cover Disks 12
Complete multimedia suite, with *ProView*, a QuickTime editor, a morph creator and a sound editor; an absorbing arcade game and five invaluable utilities to enhance any Mac.

Welcome to MACFORMAT

Everything you wanted to know about MACFORMAT, and what we'd do if we were in charge of Apple...

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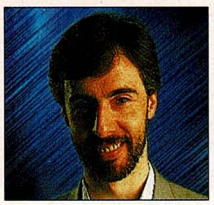
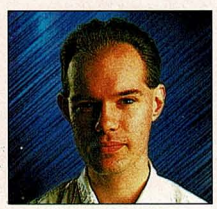


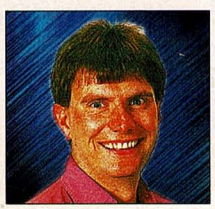
ALEX SUMMERSBY

Our Editor learned all he knows about Macs by using them, and all he knows about management by just muddling through. If he were in charge of Apple, he'd adopt the same tried-and-tested management style he uses on MACFORMAT: close your eyes and just hope things work out.



RICHARD HILL

Our News Editor and multimedia guru is used to taking a long-term overview, and he says if he were Apple's boss it would all be a matter of strategic alliances: co-develop with Motorola and IBM, co-market with Acorn, license to Olivetti and Bandai... then merge with Orange.



COLIN DALZIEL

Our highly qualified Disc Editor knows his way around PCs as well as Macs. If he ran Apple, he says, it would be free Macs for all, so the world could be rid of those unfriendly PC-type computers. Noble, we have to agree, but not a very practical business plan...

LINDSAY BRUCE

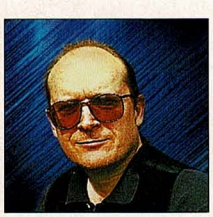
Our Technical Writer has a three-point plan: take out full page adverts in *The Times* blowing a raspberry at Windoze 95, have the Apple software engineers flogged for not fixing the file sharing bug in any version of System 7, and make all Macs come with at least 24Mb of RAM.

DEREK SMITH

If our techie whiz were boss of Apple, he'd flog it to Microsoft for several billion pounds, then buy a medium sized island in the West Indes, retire there and read the reports about how Bill Gates has ditched support for the PC in favour of this great new platform he's discovered.

ROD LAWTON

Our Mac all-rounder tackles everything from multimedia authoring to databases this issue, and the strain is showing. Asked what he'd do if he were in charge of Apple, he said: 'I *am* in charge. I sacked Spindler. Er, that was his name, wasn't it? Or am I thinking of *Spindler's List?*'



BRIAN LARKMAN

Brian teaches computer art in the North of England, and notes that Macs are more popular the further north you go – they're the most common computer in Scottish schools, for example. He'd boost Apple's fortunes by moving *everybody* 200 miles to the north. Talk about thinking big.

ABOUT MACFORMAT

Welcome again to MACFORMAT, Britain's best-selling Macintosh magazine. Every issue we bring you:

- Tips, techniques and tutorials covering the range of Mac applications, from graphics, spreadsheets and databases to music, multimedia and games.
- Features about exciting Mac developments and novel uses, accompanied by Cover Disk programs whenever possible, so you can discover what your machine can do and try things you might not have tried before.
- All the latest Mac-related news, plus all you want to know about the wider issues, the people behind the headlines and the stories behind the stories.
- Authoritative reviews of interesting and affordable products, with clear buying recommendations.
- Cover Disks and CD-ROMs with demos so you can try software before you buy, useful utilities (specially chosen to complement features in the magazine), selected shareware programs, games, readers' contributions and much more.

Whether you're a veteran or a novice, we'll help you get more out of your Macintosh, whatever you use it for.

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ABOUT OUR REVIEWS

Every MACFORMAT review is designed to inform you in detail of what you'd be getting if you bought the product and help you decide whether it's worth your money. It tells you the essentials, without jargon.

MACFORMAT *does not review demos or unfinished programs.* We review only the finished products you could buy yourself, to help you decide whether to buy or not. We give clear buying recommendations, and rate products on this scale:

- 80+% means excellent.
- 70+% means well worthwhile, though not really outstanding.
- 60+% means good, but with a few shortcomings or some limitations.
- 50+% means acceptable but flawed.
- A rating below 50% means you should think carefully before parting with your money.

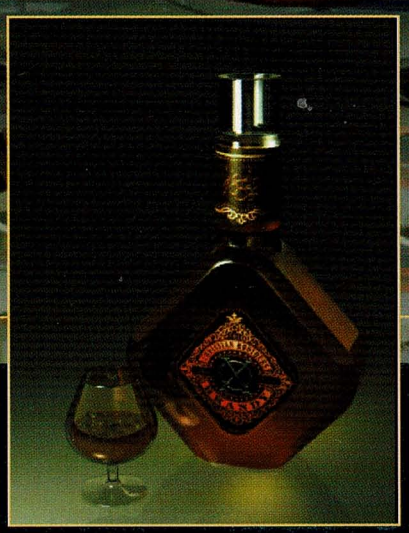
The MACFORMAT Classic Award

If a product earns a rating of 90% or more, we'll give it a MACFORMAT Classic Award. This means what it says: we judge the product to be a classic, a standard-setter of its type, something really special.

- We make every effort to verify all the information we publish, but products and prices do change. We always quote list prices (RRPs), but street prices do vary. Shop around, and check with the supplier before buying to make sure that the product you're considering will meet your needs. MACFORMAT cannot accept responsibility for any errors or omissions or for any losses that may arise as a result, but it is our policy to correct any errors of fact whenever we possibly can.
- MACFORMAT welcomes contributions for publication but we regret we cannot return them. Submissions are accepted on the basis of full assignment of copyright to Future Publishing Ltd, *unless* otherwise agreed in advance and in writing. We'll assume that all correspondence is for publication and all CD-ROM demos or readers' submissions may be incorporated on a Future Cover Disk/CD-ROM unless you expressly say otherwise in writing. See also p.32.
- We hope you'll understand if we can't reply to all mail, faxes and e-mails personally, even if you include an SAE. Nor can we answer technical queries by phone – sorry!

FROM GOMARK DESIGN

For image quality that matches the reality, SCULPT 3D is the essential tool.



Price exclusive of VAT and delivery

Sculpt 3D v4.1 is a powerful three dimensional design and visualisation tool for theMacintosh.It is a complete design system that combines vertex, spline and boolean-based surface modelling, material editing, texture mapping, 64-bit photorealistic ray trace rendering, and camera spline path animation into a single integrated application.

All of which brings the flexibility of a workstation system costing several times the price, to your desktop. The modelling tools in Sculpt are designed to provide absolute control over all objects at all times without compromise. Any object regardless of complexity, can be constructed accurately. Sculpt 3D 4.1 will transform your vision into stunning reality.

For further information and details on Sculpt 3D 4.1 please contact:-

GOMARK DESIGN

Gomark Limited
10 Hurlingham Business Park
Sulivan Road
London SW6 3DU
Tel: 0171 731 7930
Fax: 0171 736 1215

Having worked his fingers to the bone, our Disk Editor Colin Dalziel proudly presents a double-CD feast of software delights...

There's a huge 1.2 gigabytes of software for you in this double-CD issue of MACFORMAT, including a whole CD dedicated to the cream of multimedia authoring programs. Plus there's our usual great collection of demos, multimedia resources and over 100Mb of the latest shareware.

On Disc 1

- **Clip Photos:** 25 high-resolution sample images from Corel.
- ***Color It!* images:** material to accompany our *Color It!* how-to on page 64.
- **Demos:** games, Web authoring and graphics software for you to try out.
- ***MACBOY Organiser:*** try out the software analysed on page 70.
- **Multimedia Resources:** textures, sounds and tutorials for your projects.
- **Readers' Corner:** art and software from MACFORMAT readers.
- **Resources:** including QuickTime 2.1 and Sound Manager 3.1.
- **Science on CD:** multimedia project from the University of Plymouth.
- **Shareware City:** over 100Mb!
- **Shareware in MACFORMAT:** all the shareware from our reviews (page 110).

On Disc 2

- **Apple Media Tool:** Apple's own multimedia authoring software.
- **Trials** of *Director 4.0, SuperCard, ProView, HyperStudio, The Digital Chisel, Astound, mTropolis, Special Delivery 2.1.1.*
- ***Infini-D*™:** animations for you to use in your own projects.
- **Sound** files and utility software.

FLOPPY OR CD?

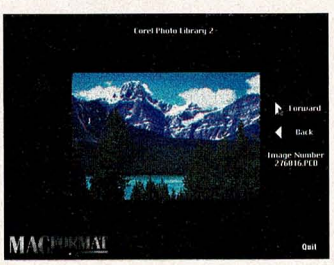
MACFORMAT is available in two editions: one with a CD-ROM and one with a high-density floppy disk. Details of the floppy programs start on page 14. The CD contains all the software that's on the HD Cover Disk, in a folder called Floppy.

Clip Photos

Sample images from Corel

Requires: colour Mac, graphics software

The Corel images for you to sample in this issue come from the *Corel Photo Library 2*. The *MACFORMAT Image Browser* included makes viewing the images easier. This is a simple slide show, which enables you to see the images at your own pace on your Mac screen without having to open any other software. Alternatively, you can use *GraphicConverter*, available in the Resources folder on the CD.



The MACFORMAT *Image Browser* helps you to view this issue's Corel Clip Photos quickly.

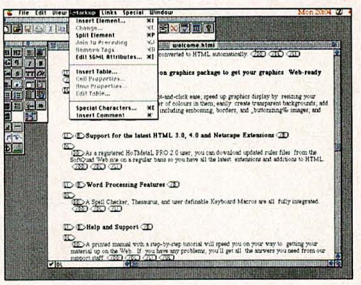
RUN TIME!

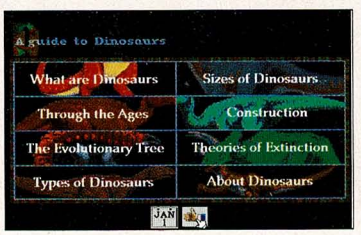
Some of the demos on the Cover CD require installation on your hard disk – they won't run direct from the CD. Most of these programs use an installer, so when you double-click on this, just follow the on-screen instructions and you should be fine. Even if there's no installer, it often helps to copy demos to your hard disk – at the very least they should run faster!

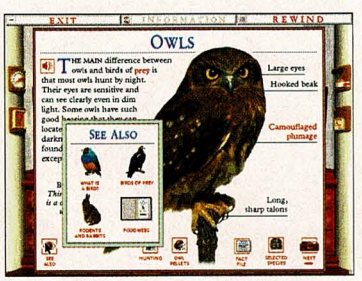
Demos

Games, 3D clip art, Web authoring software and much more

Requires: see individual Read Me files







From 3D art to intergalactic battles. There's something for everyone to try out in this issue's demos section.

There are three games for you to try in the demo section this issue. Flying into the lead, *F/A-18 2* (reviewed on page 118 this issue) gives you amazing graphics and control as you fly a mission in a well armed aircraft. *AmoebArena* – reviewed next issue – is a futuristic board game, which puts you in a tactical battle where the control of a whole solar system rests on the result. And bringing you back from the future to the past, *Dino Park Tycoon* puts you in charge of your own dinosaur theme park. Can you keep both the animals and the customers happy *and* make a profit at the same time? If you think this sounds easy, try it for yourself, then see what our reviewer has to say about it on page 123.

The *3d-Active* demo brings you a new innovation in clip art. This amazing product enables you to view 3D artwork which rotates as you move your mouse. You can also export one sample in a variety of formats including PICT and QuickTime. Explore as you like, then read our review on page 90. Another art-based demo is *Specular TextureScape*, which shows you how to create your own unique textures and backgrounds for your artwork.

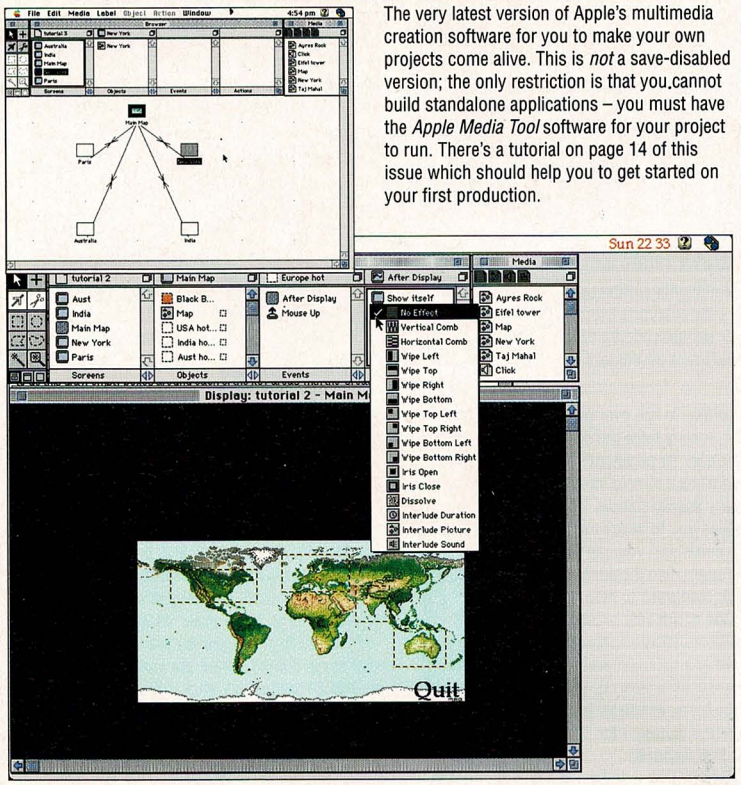
If you are interested in a different kind of creation, try out our demo of *HoTMetaL 2.0* (reviewed on page 92). This enables you to design your own World Wide Web site, without needing programming skills.

Rounding off the demo section is a rolling demo of Dorling Kindersley's highly rated *Encyclopedia of Nature*, reviewed on page 100.

Apple Media Tool

Multimedia authoring software

Requires: IIci or better, 4Mb of RAM (8Mb recommended), System 7.1 or later



The very latest version of Apple's multimedia creation software for you to make your own projects come alive. This is *not* a save-disabled version; the only restriction is that you cannot build standalone applications – you must have the *Apple Media Tool* software for your project to run. There's a tutorial on page 14 of this issue which should help you to get started on your first production.

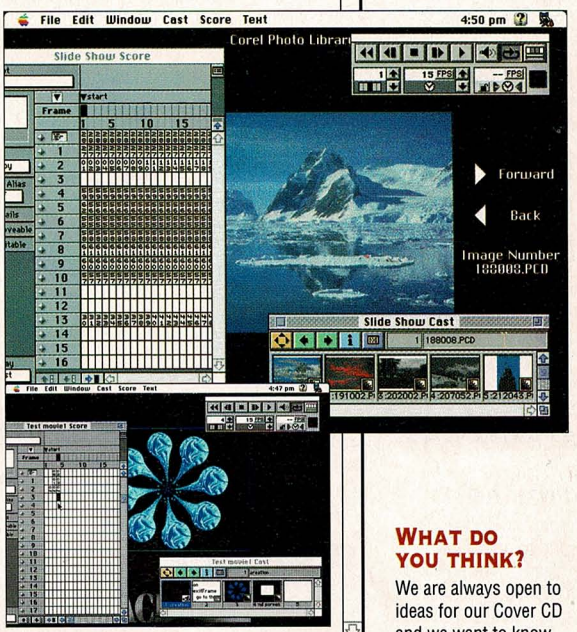
Create your own multimedia with Apple's highly rated authoring software.

Director 4.0

Multimedia authoring demo

Requires: LCII or better, System 7 or later

One of the most widely used multimedia authoring packages, *Macromedia Director* offers you simple integration of different media, linked with powerful scripting capabilities. This save-disabled demo enables you to explore the software to the full. To find out more about *Director* and its uses, read the review on page 50.



CUSTOM ICONS

The icons we use on the CD help to give it a friendly atmosphere, but they do slow it down. Install *CDIcon-Killer,* which is in the Resources folder on the CD, if you want to speed things up.

WHAT DO YOU THINK?

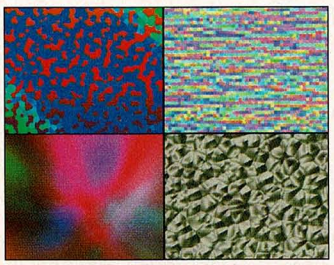
We are always open to ideas for our Cover CD and we want to know what you think. Should we include an interface to make it easier for you to navigate? Do you miss the Highlights folder? Do you want more games demos or are there already too many? How could we improve the disc? Let us know and your ideas may change the face of the MACFORMAT Cover CD. If you come up with an idea that we use, we'll make sure you get the credit you deserve (and of course some free software!)

Multimedia Resources

Sounds, textures and more

Requires: see individual Read Me files

Top of the bill is a specially created collection of multimedia textures for you to use in your own productions. These textures have been saved in Indexed Colour format. This means they use the least amount of memory possible, and so load quickly on to your screen. They are designed to fill the standard monitor size of 640 x 480 pixels, but if you need them larger or smaller you can easily re-size them using a variety of graphics software packages (*GraphicConverter* is included in the Resources folder). If you prefer, you can re-size the textures in a multimedia package such as *Apple Media Tool*. There is also a selection of sound files for you to use in your projects, and some sound editing software to help you fine tune the sound files. This folder also contains the files you need to follow the *Apple Media Tool* tutorial that starts on page 14.

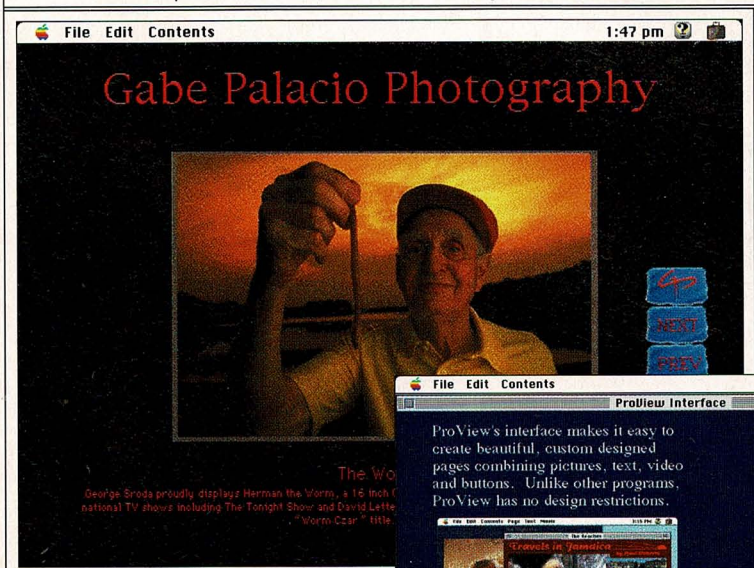


Multimedia-ready textures which you can drop straight into your multimedia work.

ProView demo

Presentation software demo

Requires: LC or better, 2 Mb of free RAM, System 7.0 or later


Gabe Palacio Photography
ProView Interface
ProView's interface makes it easy to create beautiful, custom designed pages combining pictures, text, video and buttons. Unlike other programs, ProView has no design restrictions.
The built in custom movie controller allows full control of QuickTime movies
Return to About ProView
The toolbar makes creating pages as easy as point and click.

ProView is the perfect choice if you want to create presentations in the style of a slide-show. This wonderful program is possibly the easiest way to get started with multimedia because of its very simple point-and-click interface. You can, of course, also include interactive elements and different media in your presentation to bring it to life. This 'demo' is not save-disabled or time-limited, you just need the *ProView* application with your projects in order to view them.

Continued on next page

NASTY LEGAL WARNING

The clip media on the MACFORMAT Cover CD is free for you to play with and experiment on, but you *must not* sell it on or distribute it in any productions, either commercial or shareware, without the specific permission of the relevant individual copyright owners.

PROBLEMS?

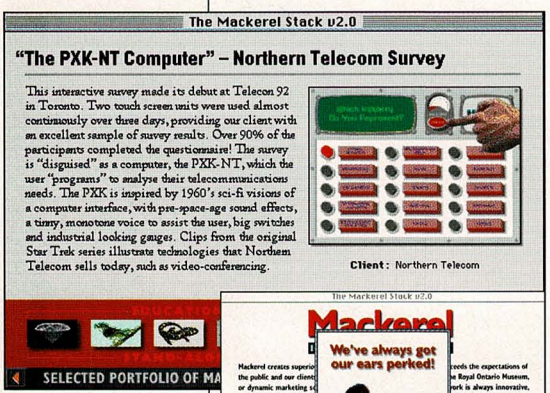
If you have problems quitting any of the rolling demos on the Cover CD, just press **[command] [Q]** and you should go back to the Finder. If this doesn't work, press **[command] [option] [escape]** to Force Quit.

SuperCard trial version

Multimedia creation tool

Requires: LC or better, 4Mb of RAM, System

A card-based system that gives you a wide range of powerful features, *SuperCard* is ideal for creating almost any multimedia project. This time-limited demo enables you to try out first-hand the power of card-based authoring. Included with the demo are some sample projects to show you just what this software is capable of. Check out the *Mackerel Stack* and see if you can find the virtual bubble-wrap game hidden inside!

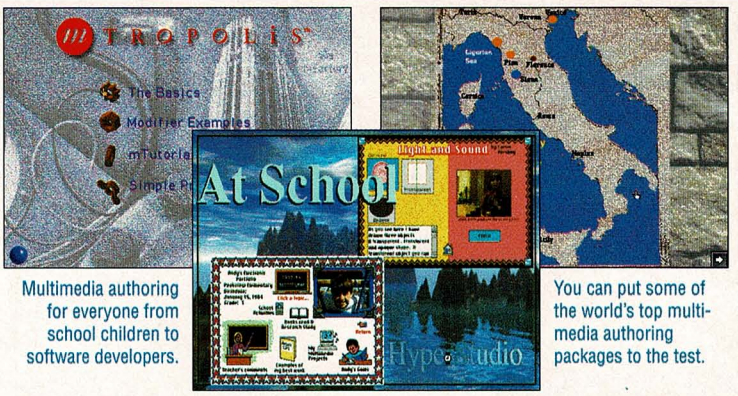

The Mackerel Stack v2.0
"The PXK-NT Computer" – Northern Telecom Survey
This interactive survey made its debut at Telecon 92 in Toronto. Two touch screen units were used almost continuously over three days, providing our client with an excellent sample of survey results. Over 90% of the participants completed the questionnaire! The survey is "disguised" as a computer, the PXK-NT, which the user "programs" to analyse their telecommunications needs. The PXK is inspired by 1960's sci-fi visions of a computer interface, with pre-space-age sound effects, a tinny, monotone voice to assist the user, big switches and industrial looking gauges. Clips from the original Star Trek series illustrate technologies that Northern Telecom sells today, such as video-conferencing.
Client: Northern Telecom
SELECTED PORTFOLIO OF MA
Mackerel
We've always got our ears perked!

We hound the software developers, so you get the latest multimedia demos.

Multimedia authoring demos

Multimedia creation tools

Requires: see individual Read Me files for details



Multimedia authoring for everyone from school children to software developers.

You can put some of the world's top multimedia authoring packages to the test.

HyperStudio has over one million users worldwide, mainly from the education sector. The reason for its popularity is easy to see: *HyperStudio* has a simple interface, yet offers access to very powerful tools. This demo version enables you to save new productions of up to four cards, but you can't re-save existing work you open. Also included is a range of ready-made resources to help you get started.

One of the best presentation packages available, *Astound* offers a simple way to put together a polished presentation which will impress any audience. This tim- limited demo enables you to use all the features – except the projector feature – for 30 days from the date you first install it.

Special Delivery 2.1.1 is a new product to the UK market. This save-disabled demo gives you access to all other features including tutorial files and resources. *The Digital Chisel* is aimed specifically at the education market. With its simple controls and easy to use features, this could well be a program you'll hear a lot more about in the future. This demo version allows you to produce projects which are fully usable up to three times.

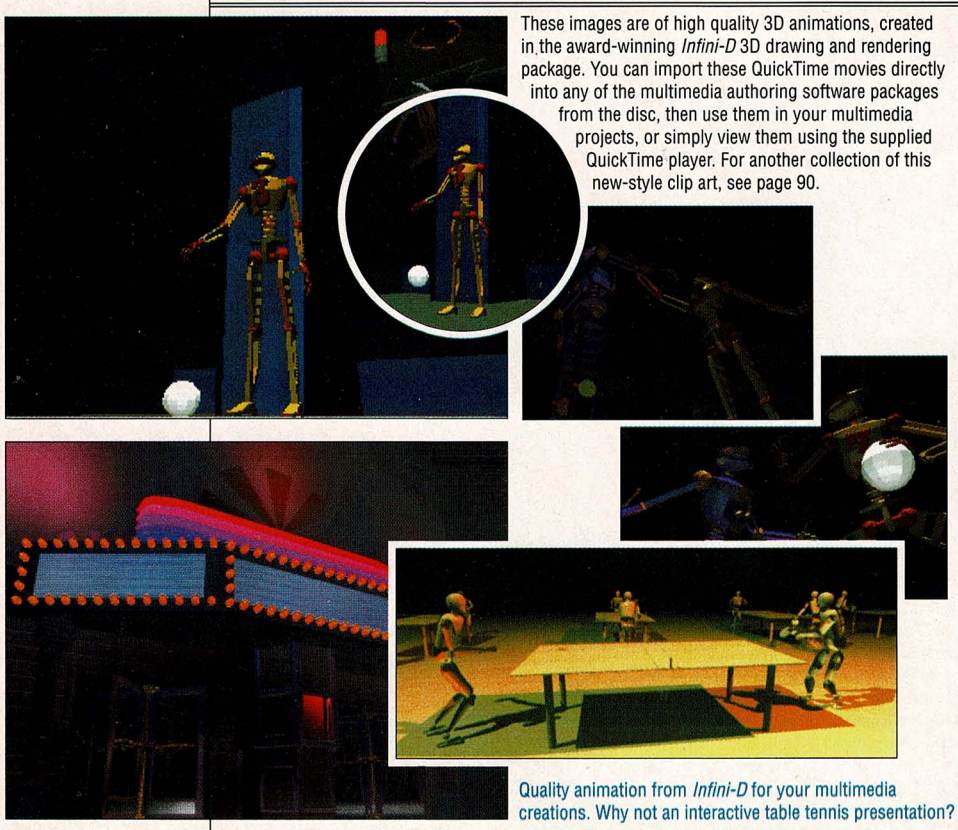
mTropolis could easily be described as the powerhouse of multimedia. Included with the demo is a range of tutorials and material for you to get started. There are some stunning animation sequences from *mTropolis* which you can also use. This demo version gives you access to a range of tools and commands, but you will need some knowledge of computer programming to get the most from this high-end save-disabled demo.

Infini-D animations

3D animated clip art

Requires: LC or better, System 7.0 or later, QuickTime 1.6.1 or later

These images are of high quality 3D animations, created in the award-winning *Infini-D* 3D drawing and rendering package. You can import these QuickTime movies directly into any of the multimedia authoring software packages from the disc, then use them in your multimedia projects, or simply view them using the supplied QuickTime player. For another collection of this new-style clip art, see page 90.



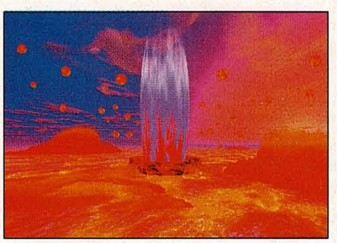
Quality animation from *Infini-D* for your multimedia creations. Why not an interactive table tennis presentation?

Readers' Corner

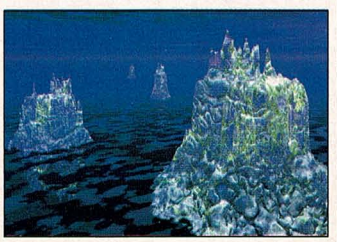
Your contributions

Requires: see individual Read Me files

We always love to show off what our readers are doing with their Macs, and this issue we have over 35Mb of your work on the disc. Every issue we have prizes to give away for your contributions, and this month Per Rindstedt and Will Redmond win copies of *Adobe Wild Type* for their stunning artwork. If you want to win software or just show off your work to over 50,000 other Mac enthusiasts, send your contributions to: The Disk Editor, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.



Strange new worlds or holiday snaps. Our readers' works of art are always amazing.



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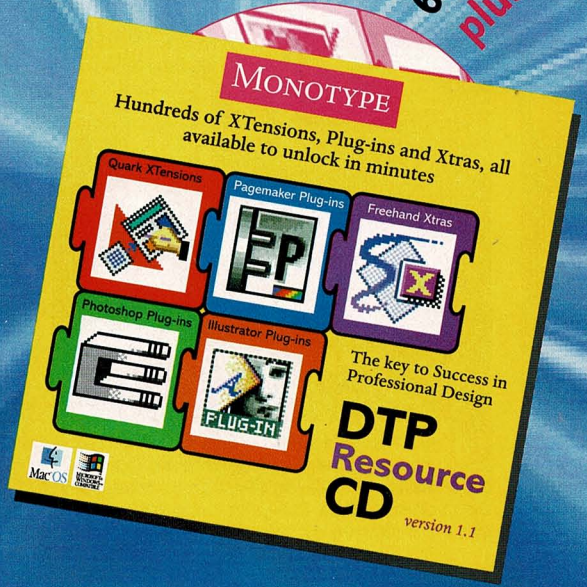

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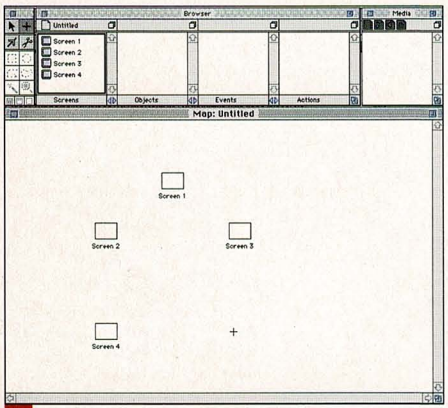
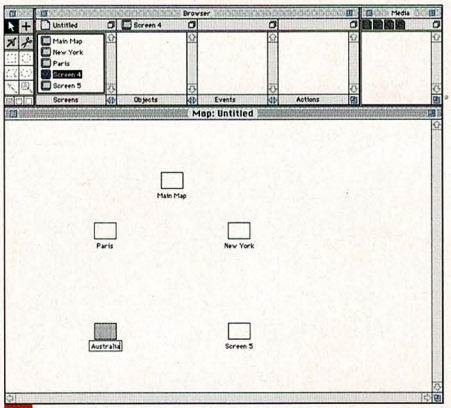
Getting started in AMT

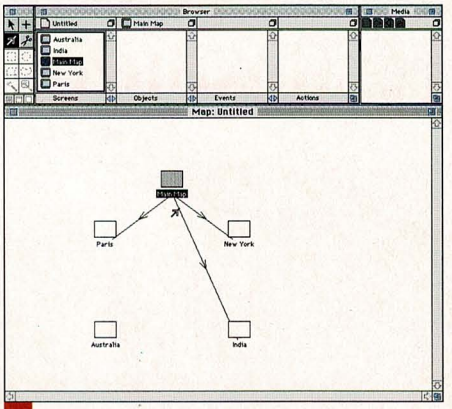
You've now got all the kit you need for multimedia, and Colin Dalziel shows you how to start your first project.



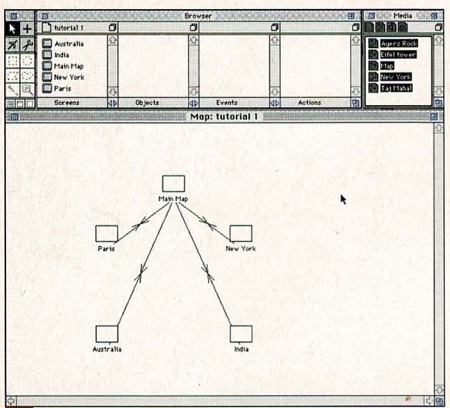
1 Launch *AMT* and you will see the Map window and five Browser windows. Select the Creation tool, and click in five different positions in the blank Map window. This creates the screens that make up the sample project.



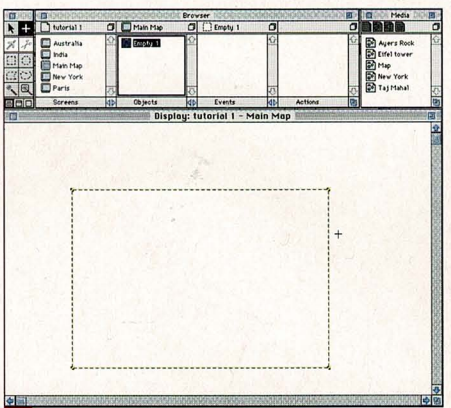
2 An icon appears each time you click on the screen. Rename these in the usual way. In the example they are called Main Map, Australia, India, New York and Paris. Next, connect the screens so you can move between them.



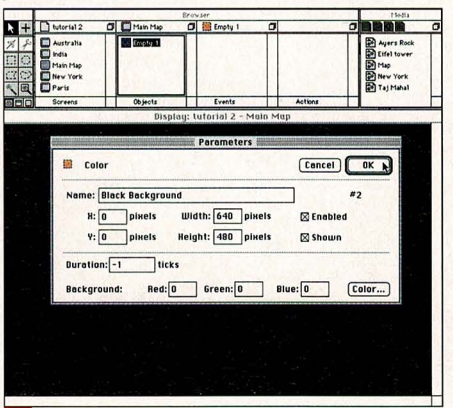
3 Select the Connection tool and click the mouse over the Main Map icon. Drag to the Paris icon. As you move, a line appears. When you are over the Paris icon release the mouse button to form a link. Repeat this process until all the icons are linked to the Main Map icon.



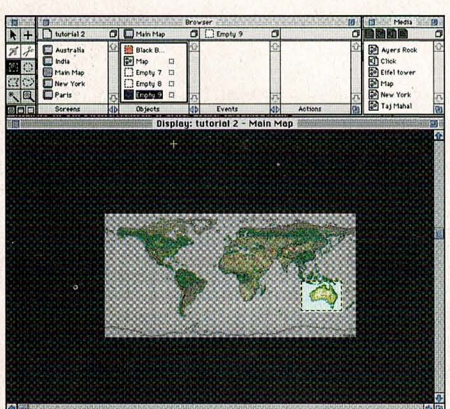
6 Before the images are placed in the project you can make a black backdrop on which to place the map. Select the Selection tool and double click on the Main Map icon. A new window will appear. With the Creation tool selected, click then drag in the new window. This process will create a rectangle.



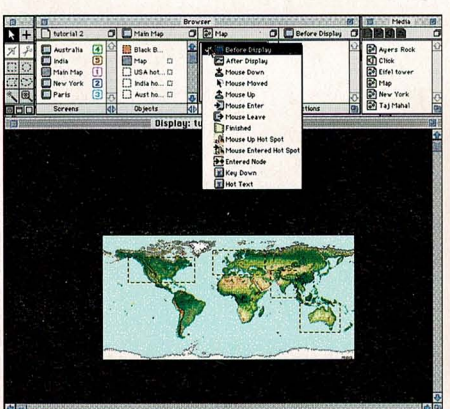
7 In the Browser window you will see the empty rectangle listed. Now if you click on the icon in the Browser window and hold down the mouse, a pop-up menu will appear. If you select **Color,** the rectangle that you have just drawn will change in colour from being clear to being filled in with black.



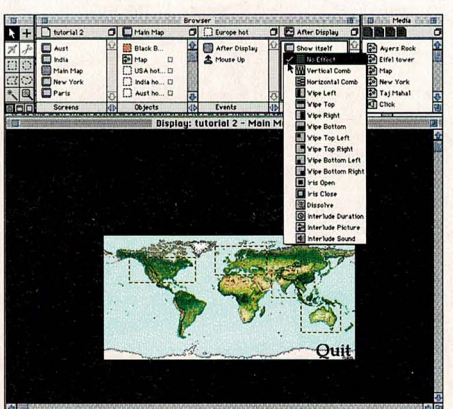
8 You change the size and position of the rectangle simply by double clicking on it. Enter the new size and position in the Parameters box that appears. To fill the screen type 640 in the Width field, 480 in the Height field and 0 in both the X and Y fields. The image will originate in the top left corner of your screen.



12 In the empty boxes you have drawn, you can add a hot spot. Draw another box on top of each active area, but this time use the Hot Region Tool. You will notice new icons appear in the Main Map Object window. Give these areas names by double clicking on their icons.



13 Now make the interactions you have set up work. In the Screen window select the Main Map icon, click on the Europe hot spot icon and select **Add event** from the **Action** menu. Click and hold the **before display** option and select **after display** from the drop down menu.



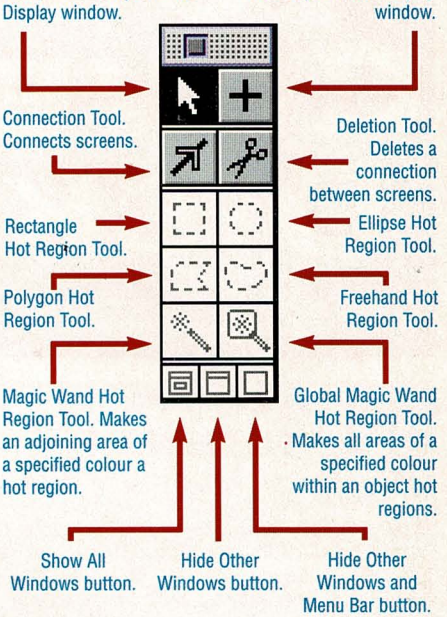
14 Next select **Add command** from the **Action** menu and select **Show.** This displays the map image. Add a wipe effect by selecting **Add effect** from the **Action** menu and choosing **Iris Open**. Change the duration of the wipe by double clicking on the wipe icon and changing the value.

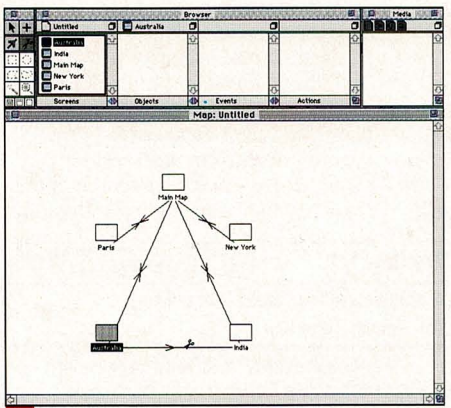
This issue on our Cover CDs you've got some of the very latest in multimedia creation software: *Apple Media Tool 2.0*. **Using the software and this tutorial, you have all you need to create your own multimedia presentations.**

You'll need 10Mb of free hard disk space to install the software, and the process itself is easy. Just double click on the installer icon which appears when you open the *Apple Media Tool* folder, then follow the on-screen instructions. This versatile program enables you to bring together information, images, sound and video easily.

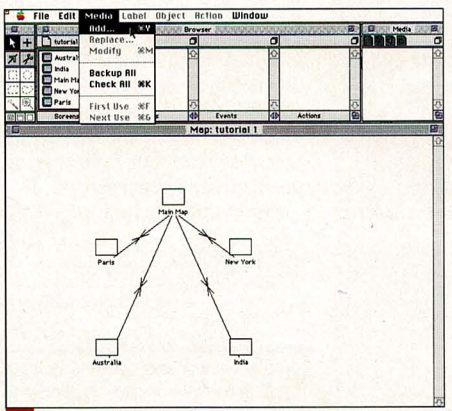
The guide below shows you how to build up a simple interactive project using images. You can of course use other media too, and we have included sounds and animation on the Cover CD for you to experiment with. **MF**

THE RIGHT TOOLS FOR THE JOB

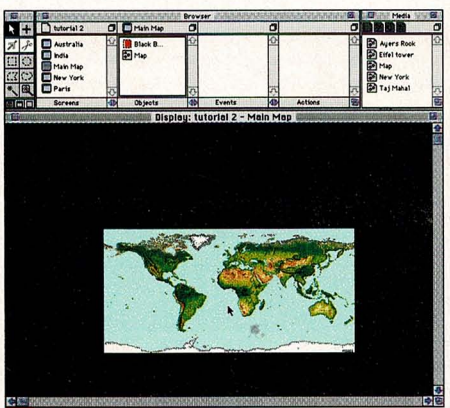

Selection Tool. Selects or drags a screen in the Map window or an object in the Display window.
Creation Tool. Creates a screen in the Map window or an object in the Display window.
Connection Tool. Connects screens.
Deletion Tool. Deletes a connection between screens.
Rectangle Hot Region Tool.
Ellipse Hot Region Tool.
Polygon Hot Region Tool.
Freehand Hot Region Tool.
Magic Wand Hot Region Tool. Makes an adjoining area of a specified colour a hot region.
Global Magic Wand Hot Region Tool. Makes all areas of a specified colour within an object hot regions.
Show All Windows button.
Hide Other Windows button.
Hide Other Windows and Menu Bar button.



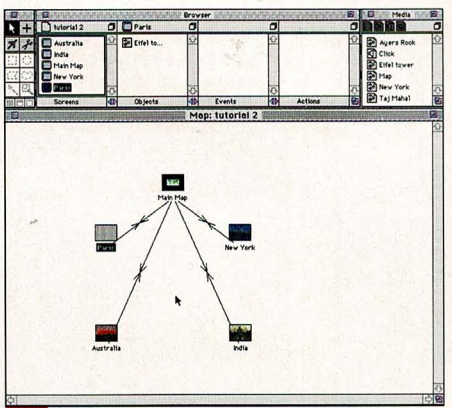
4 You will notice a pointer on the lines, showing the direction of the link. If you want the link to be two-way you must repeat the process in reverse, starting at the outer icons and joining them to the Main Map. To cut links just select the Scissor tool and click on the link to be cut.



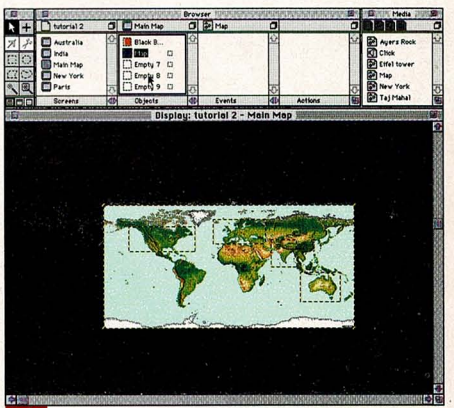
5 Add images to bring the project to life. Select **Add** from the **Media** menu. Select AMT Tutorial Files (on the MACFORMAT 36 CD-ROM in the **Multimedia resources** folder) and click **Add media in this folder**.The images will appear in the Media window at the top of the screen.



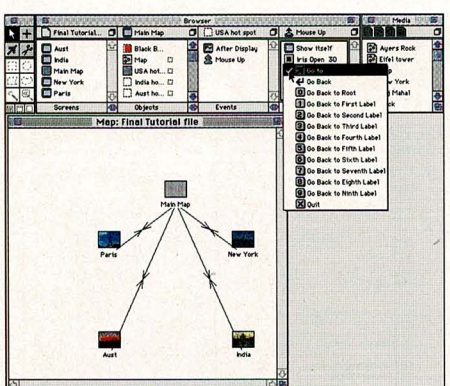
9 To place the map on the background, drag the Map icon from the Media window into the Main Map window. Release it, and the map appears. You can move it by dragging it with the mouse, or by double clicking on the map and typing 140 in the X field and 151 in the Y field of the Parameters window. This centres it on your screen.



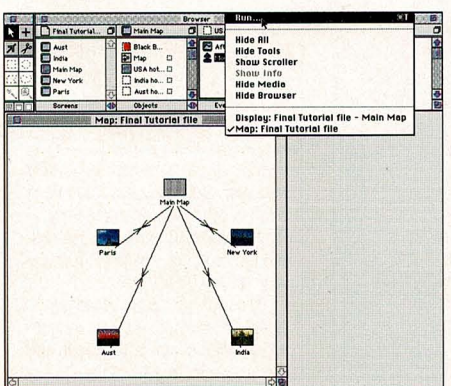
10 To place the other images in the correct position, drag the mini-icons from the Media window and place them onto their respective icons in the Tutorial Map window. The next stage is to make areas of the map active when you click on them. You do this by opening the Main Map and double clicking on the Main Map mini-icon.



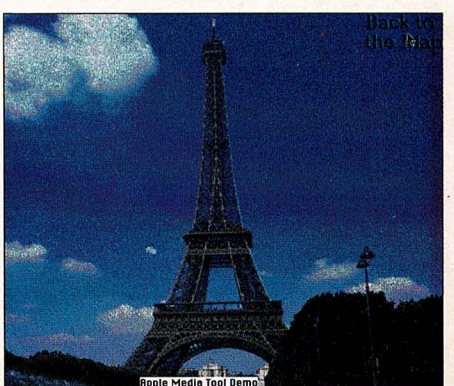
11 Select an area around Europe using the Create tool. This will be the active area that displays the Eiffel Tower picture. You will also want to add other active areas to the map. To do this draw empty boxes around each of the key areas with the Creation tool. When finished, you should have four highlighted areas on your map.



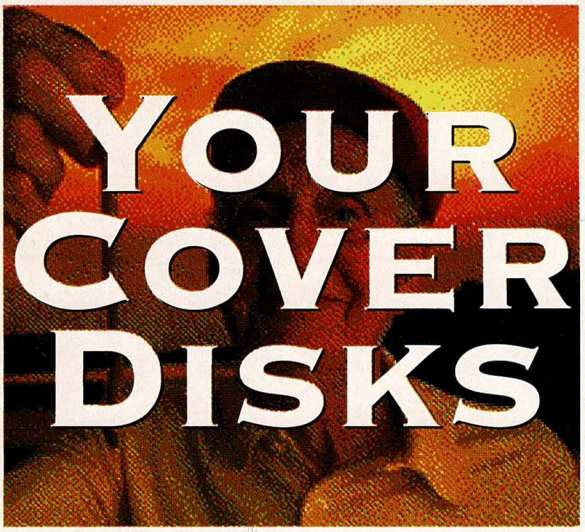
15 Add action by selecting **Add link** from the **Action** menu. Select **Go to** and drag the Europe icon from the Screens window on to the Go to icon. This activates the link between the object and the screen. Don't repeat this for each hot area; instead copy and paste the active button and change the Go to option for each of the screens.



16 Create the message 'Back to main Menu' using *SimpleText*, then import the text in the same way as you did the images in step five. Place the text on each of the images, then add a hot spot to link the text to the Map image screen. You can also assign a Quit button on the main map area in the same way.



17 Your production is complete. Select **Run** from the **Window** menu and your first interactive production will unveil before your eyes. Click on the hot areas of the map and the appropriate image will be displayed. You can add more images, including those from earlier MACFORMAT CDs, to build up your own pictorial global reference guide.



Jim the Publisher hadn't planned on two disks this issue. But then Colin Dalziel showed him what we had to offer and, well, he just went mad. Now let Colin show *you*...

Multimedia has taken the whole computing world by storm. People always say that the first thing you need to become part of the multimedia revolution is a CD-ROM drive, but this issue's Cover Disks surely prove them wrong, with some wonderful software which enables you to create your own interactive multimedia masterpieces.

The bundle includes applications to compile, organise and present your multimedia work as well as software to help prepare the raw materials, from graphics and sound files to QuickTime movies. Plus we've thrown in a selection of exclusive textures, optimised for use in multimedia.

And, as ever, our regular Disk is crammed full of goodies too – five superb utilites, plus an absorbing arcade game – making a total of more than 5.5Mb of outstanding software!

START HERE

High density floppy disks normally contain up to 1.4Mb of software, but to bring you as much as possible, we use a compression program to fit more on. So you need to decompress the software before using these disks, and this issue you'll need 5.5Mb of hard disk space for both disks. We also recommend that you always make a backup of the MACFORMAT Cover Disk, just in case anything goes wrong.

Here's what to do...

Backing up your Cover Disk

1. Ensure that the original MACFORMAT Cover Disk is write-protected (move the tab so that you can see through the hole) and insert it in the disk drive.
2. When the icon appears on the Desktop, drag the Disk's icon over your hard disk's icon. This copies the contents onto your hard disk, but they are still compressed and cannot be used yet.
3. Drag the Cover Disk icon to the Wastebasket to eject the Disk.
4. Now insert a blank, formatted high density disk. Did we mention that you'd need that? Oops.
5. Finally, drag the MACFORMAT 36 folder from your hard disk onto the blank disk's icon to make your backup.

Decompressing the Cover Disk contents

1. To decompress the Cover Disk contents, open the MACFORMAT 35 folder on your hard disk and double-click on the MACFORMAT 35 icon.
2. You'll see a screen telling you about the compression utility we've used. Click **Continue** to go on.
3. A box then asks you where you want to save the software. Choose the place on your hard disk where you want everything stored and click **Save**.

Just a word of warning...

Before installing the Cover Disk, we always recommend that you back up any important work on your hard disk. This precaution will avoid problems should it transpire that any of the software isn't compatible with your setup.

We make every effort to check our Cover Disks for compatibility and viruses, but the information here is intended as a guide only, and MACFORMAT cannot be held responsible for any damage to data, any inability to use this software or any resulting losses. So please, take the precaution of backing up first.

ProView 1.1

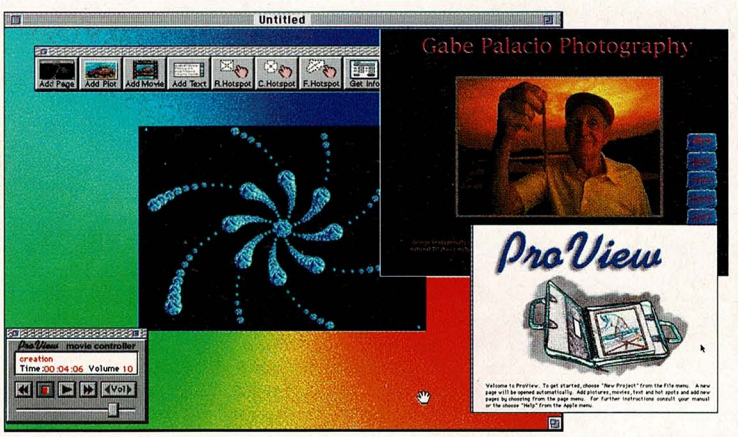
Presentation software – full program (without standalone creator)

Requires: LCII, System 7.0 or higher

ProView is a great program to start putting your first multimedia presentation together. You can combine still images, QuickTime video, text and sound to produce impressive productions. As you'd expect from a multimedia package, you can highlight areas and make them active so the user can move through your presentation by simply clicking on the areas you define.

The real strength of *ProView* is its simplicity. There is absolutely no programming required, so if you know how to use a Mac you can use *ProView*. To help you along there's an excellent help file which takes you through every stage of the program and shows you how to get the most out of it.

This version is fully-functional, *not* a save-disabled demo. The only restriction is that you need to use the program to play back your presentations – that is, you can't create stand-alone documents. For that you have to upgrade to the full version – but you can get that at a bargain price too. For details, read the **ProView Overview** document included on the disk.



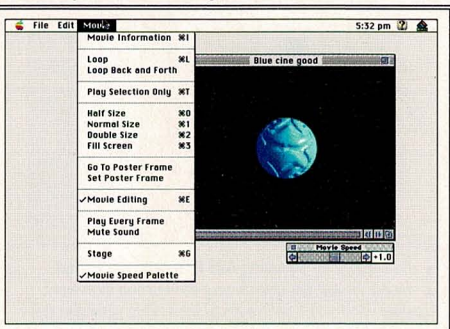
Play it Cool

Video player/editor

Requires: LC, 1MB of free RAM, System 6.0.7 or higher, QuickTime 1.6

If you really want to impress people with your presentations, a couple of video clips usually does the trick. *Play it Cool* is a simple video player and movie editor which will run in only 1Mb of free RAM!

Of course you don't get flying digital effects, but what you do get is the ability to cut, copy, paste, add and scale your movies. These are all the basic tools you need to create the perfect video to complement your multimedia work, and at only $12 shareware fee to register it's a real bargain to boot.



GOT A PROBLEM?

If any of your cover-mounted high density disks or CD-ROMs is defective, return it to us and we will replace it. Please make sure you have followed the installation procedures described in these pages correctly, to ensure that there is a physical problem with the disk itself. Otherwise, the replacement will be just the same!

Return HD disks to:
MACFORMAT disk returns, TIB plc
TIB House
11 Edward Street
Bradford, BD4 7BH

Return CD-ROMs to:
MACFORMAT CD returns
Future Publishing
FREEPOST (BS4900)
Somerton, Somerset, TA11 6BR

Enclose a self-addressed padded envelope (but we'll pay return postage) with the disk or CD, and a description of the fault. Please do not return disks or CDs to the editorial office; we don't hold any stocks of them and can only refer you to the addresses above.

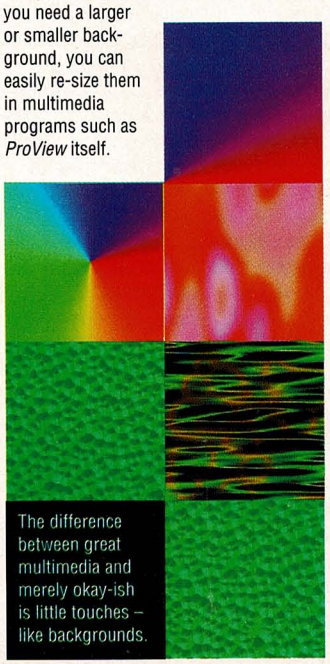
Textures

Multimedia-ready resources

Requires: Any colour Mac, graphics software

To add that finishing touch, we have included four *exclusive* textures, in a format that makes them ideal for use in your multimedia productions.

They have been saved in indexed colours format so they use the least possible memory. This means they will open as quickly as possible in your presentations. They are also saved at a resolution of 640 x 480 pixels, ready to fill the screen, but if you need a larger or smaller background, you can easily re-size them in multimedia programs such as *ProView* itself.



The difference between great multimedia and merely okay-ish is little touches – like backgrounds.

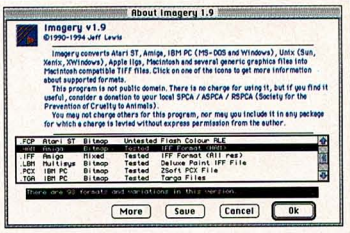
Imagery

File conversion utility

Requires: LC, System 7.0 or higher

Imagery is a wonderful little program for converting a wide range of graphic file formats into the more familiar TIFF format that your Mac knows how handle – the program can translate 98 different file formats from a wide range of computers including Amigas, Atari STs, and PCs.

As if all this weren't enough, *Imagery* can also convert a great variety of sound file formats into AIFF format, perfect for use in your multimedia productions – or further tweaking...



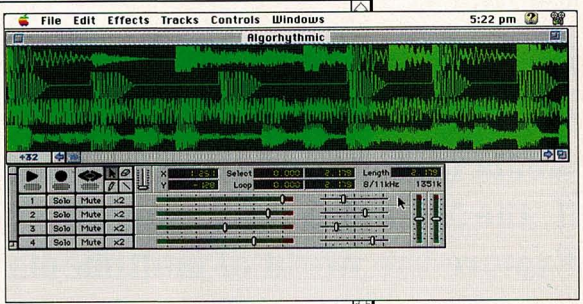
Sound Sculptor II 2.0.1

Sound manipulation software

Requires: LC, 2Mb of free RAM, System 7.0 or higher

To complete any multimedia production, you'll want to add your own sound effects and music. *Sound Sculptor II* is the perfect choice for preparing your sound before you add it to your work. This powerful program enables you to record, mix and fine tune four channels of sound up to CD quality. If you have a more modest system and don't need such high quality sound (and such large files), you can re-sample the sound and create far more manageable files.

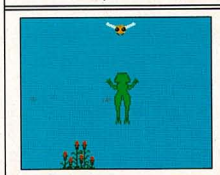
Yeah, like, that's a wassname, a Sinus Wave, innit? You know, the one like a Christmas tree on its side. And the loudness goes all the way up to 11, too.



Koji the Frog 1.0.2

Arcade game

Requires: LC, 2Mb of free RAM, System 6.0.7 or higher, 13-inch colour monitor



Koji the Frog is an addictive arcade challenge. You control a friendly frog who has to catch all the bugs which fly about the screen. To do this you have to use your amazing jumping power and your elastic tongue! Of course there are hazards to avoid in the shape of snakes, grumpy gophers (with dynamite) and bolts of lightning, so you have to time your jumping to perfection to stay alive. Lots of fun and lovely graphics too!

Utilities

Various

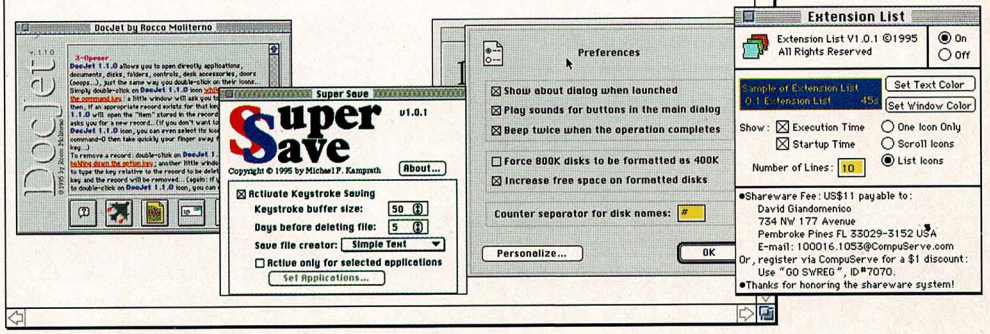
Requires: see individual Read Me files

You know what a pain it can be copying large files, waiting around, staring at a crawling grey progress bar. *CopyBeep* lets you leave your Mac to it, and gives you a shout (or beep) when it's finished. So instead of watching your Mac, you'll be able to go and watch the kettle – much more productive.

Disklosure gives you a range of options for formatting your floppy disks, including a time-saving option to format a disk as soon as it is inserted. *Super Save* is a backup utility with a difference. It saves all the keystrokes you make while you're working and stores them in a folder. If you crash, you can open the recorded file and get all those keystrokes back again! It's a Control Panel, so to install it you just drag it over your closed System Folder and your Mac will put it in the right place for you.

DocJet gives you a range of features to make opening files and folders easier. You can assign keys to open applications and set up *DocJet* to open specific folders when you drag files onto its icon. *Extension List* is a simple Extension (so you install it just like *Super Save)* which gives you a full list of the Extensions and Control Panels that load at startup.

They're all invaluable, but our vote for spookiest utility goes to *Super Save* – an ideal second line of defence against the dreaded crash that turns vital documents into ex-files!



FLOPPY TOO

We are always on the lookout for readers' contributions for the floppy as well as the CD, so don't be put off just because you don't have a CD-ROM drive. Send them in to **The Disk Editor, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.**

Whether you're creating multimedia or just want to understand it, the Net holds the answers. Explore the world of multimedia from our pages on FutureNet.

The Internet offers plenty of help if you're creating your own multimedia. We've collected the best sites and placed links to each on our pages on FutureNet, Future Publishing's own Web site. Seek them out using these links, or alternatively, type in the address we've given for each site.

The main areas covered on the Net include: indexes of the multimedia sites available; archives that store images and sound samples you can use in your projects; and Web sites that show you the future of the Web as it becomes a multimedia venue itself.

Index of indexes

You'll find the Internet directory Yahoo an excellent place to start. Its **Multimedia** listings (http://www.yahoo.com/Computers_and_Internet/Multimedia/) are broken up into basic categories to help you pinpoint the page you're looking for quickly.

If you need an introduction to multimedia and the technologies it uses, the **Index to Multimedia Information Sources** (http://viswiz.gmd.de/MultimediaInfo/) gives you access to the latest official and unofficial briefs on technology standards used in multimedia, such as CD Plus and PhotoCD. You can also use the page to discover Frequently Asked Questions on general areas of multimedia like animation or using video.

Which program should you use to create your projects? The slightly misnamed **Authoring Languages** (http://www.mcli.dist.maricopa.edu/authoring/lang.html) gives a concise summary of the various programs you can choose from on the Mac and other types of computer, as well as providing links to sites that give you more information on each program.

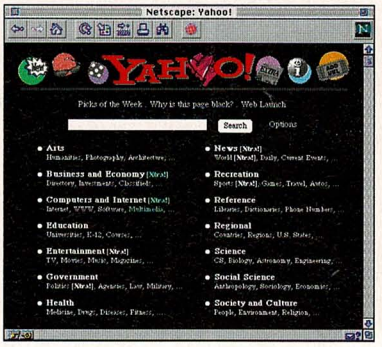
WHY ARE THESE PAGES BLACK?

The Web pages shown here are just a few of hundreds that recently turned black instead of their typical grey. See this issue's News, starting on page 21, to find out why.

Getting connected

All you need to connect to FutureNet is a modem and an Internet account like Demon or CityScape, or a direct server connection through work or college. There are no hidden charges – FutureNet is free! Use your World Wide Web browser to connect to

http://www.futurenet.co.uk/



Yahoo is a good place for discovering links to sites that cover the many aspects of multimedia.

Pictures from the NASA space archives are among the images you can get for free from the Web.

The archive files

There are hundreds of Web and other types of Net sites devoted to storing resources you can use when creating material for the Web or a CD-ROM.

Of all the different types of media you'll find, images take up the most space. They're typically stored in one of two file formats: GIF is a low-quality format used on Web pages, which keeps the file sizes down; whereas JPEGs offer detailed images, compressed to reduce loading time.

But before you get too excited about a new world of free images and sounds that you can use, be warned. Copyright laws apply to material on the Web, just as much as they do anywhere else. You can't use an image, sound sample or even a font without the permission of its owner.

The biggest danger when using the Net is that it's incredibly easy for anyone to make these items available for you to download. Newsgroups in particular are infested with images that have been scanned in. Although these are available, they are still illegal.

There are sites where material is offered on a royalty-free basis, as long as you follow the owner's conditions. For example, the **NASA Digital Image Collection** (http://images.jsc.nasa.gov/html/home.htm) features thousands of well-organised photos taken during American space missions.

Take a look at the **Virtual Image Archive** (http://imagiware.com/via.cgi) to get an idea of the many image sources around, from photos to computer fractals and fantasy art.

Yahoo's **Multimedia Sound** listings (http://www.yahoo.com/Computers/Multimedia/Sound/) can point you in the direction of samples, while the **Internet Font Archives** (http://jasper.ora.com/comp.fonts/Internet-Font-Archive/) present an excellent guide to commercial and free fonts, and how to use them.

The Web's future

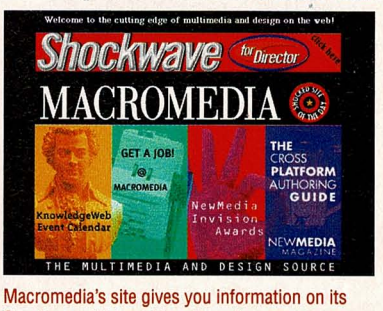
Software that enables your Mac to use live multimedia from the Web is being developed. Nearly all of it is centred around the new version of the *Netscape Navigator* Web browser, which you can get from the **Netscape** site (http://home.netscape.com/).

Macromedia's site (http://www.macromedia.com/) introduces you to Shockwave, a system that uses *Director* and *FreeHand* to create material. You'll be able to download free Shockwave viewers as they become available.

Java is a brand-new programming language designed specifically for creating Internet multimedia. You'll find out more about the forthcoming Mac version from Sun Microsystems' **Java** site (http://java.sun.com/).

RealAudio is a system that enables you to play back sound clips from the Net, giving you near-live radio. Visit the **RealAudio** pages (http://www.realaudio.com/) to get the software and sample the best sites. **RICHARD HILL**

The developing multimedia Web is based on new software you can buy from Netscape's own site.



Macromedia's site gives you information on its Shockwave Web multimedia software, out soon.

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1.3Gb Optical + 5 Disks External	£999
4 x CD ROM External	£159
4 x CD Writer, Toast software + 5 CD's External	£1699
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Memory

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16Mb 72 Pin SIMMs from	£299
32Mb 72 Pin SIMMs	£659
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THE GH Advantages...

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eWorld with internet access (modem required), ClickArt, Claris Works, Hypercard Player, MacGallery, Mavis Beacon, Millie's Maths House, System Software, PC Exchange, Spin Doctor, SuperMaze Wars and Thinkin' Things 2 **PLUS...** EA 3D ATLAS, ASTERIX LANGUAGE, CONCERTWARE, GROLIER ENCYCLOPAEDIA, MYST, ROCK-RAP-ROLL, SNOOPY, MAKING MUSIC, REDNEX, DORLING KINDERSLEY "The Way Things Work" and DAEDELUS ENCOUNTER... ALL ON CD! Photo (right) shows... **SAMPLES OF FREE SOFTWARE** included with GH PERFORMA PLUS 2 MACS on these pages. NB. Some titles are pre-installed ready for use and are NOT packaged as displayed here. CD Disks are provided separately.

MACINTOSH TV BONUS

Macs with TV OPTIONS from GH include... APPLE VIDEO PLAYER & AVID VIDEO SHOP SOFTWARE **FREE OF CHARGE!** (shown by a tick in TV option columns below)

PERSONAL COMMUNICATION SOLUTION

APPLE PERSONAL COMMS SOLUTION... **FREE OF CHARGE!** *Macs marked with this symbol are supplied with internal 14400 Modem with send and receive software for FAX, ANSAPHONE, and INTERNET SERVICES (via eWorld).*

MACINTOSH MPEG BONUS

Macs with MPEG (full motion CD Video Playback) include... RETURN TO ZORK, OCEAN LIFE HAWAII, WARREN MILER and WILD AFRICA **FREE OF CHARGE!**

CHECK OUT OUR NEW LOWER PRICING - OUR LOWEST PRICES EVER!

PERFORMA 630

630, 8/500, CD

£649

JUST £4.13 PER WEEK

- Expandable to 36Mb
- 66/33MHz 68LC040
- Built in CD Drive
- Options... TV Tuner, Video In Card

Plus2	RAM	HD	MONITOR	CD	TV	K/B	Price
✘	8Mb	500Mb	✘	✔	✘	✘	£649
✘	8Mb	500Mb	14" GH	✔	✘	✔	£849
✘	8Mb	500Mb	14" M/S	✔	✘	✔	£949
✔	8Mb	500Mb	✘	✔	✘	✘	£699
✔	8Mb	500Mb	14" M/S	✔	✘	✔	£979
✔	8Mb	500Mb	15" M/S	✔	✘	✔	£1049

PERFORMA 5200/5300

5200, 8/800, CD

£CALL

FOR SPECIAL **LOW** ENTRY LEVEL PRICES!

LOW WEEKLY PAYMENTS!

- 15" MultiScan Monitor with TV/Video options
- Quad Speed CD Drive
- 75/100MHz Power PC

	Plus2	RAM	HD	MONITOR	CD	TV	K/B	Price
5200	✘	8Mb	800Mb	15" Int. FST	✔	✘	✘	£CALL
	✘	8Mb	800Mb	15" Int. FST	✔	✘	✔	£CALL
	✔	8Mb	800Mb	15" Int. FST	✔	✘	✘	£1099
	✔	8Mb	800Mb	15" Int. FST	✔	✘	✔	£1169
	✔	8Mb	800Mb	15" Int. FST	✔	✘	✔	£1199
	✔	8Mb	800Mb	15" Int. FST	✔	✔	✔	£1219
5300	✔	8Mb	1.2Gb	15" Int/MPEG	✔	✔	✔	£1829
	✔	16Mb	1.2Gb	15" Int/MPEG	✔	✔	✔	£1949

PERFORMA 6200

6200, 8/500, CD

£789

JUST £5.00 PER WEEK

- 75MHz PowerPC CPU
- Quad Speed CD

Plus2	RAM	HD	MONITOR	CD	TV	K/B	Price
✔	8Mb	500Mb	✘	✔	✘	✘	£789
✔	8Mb	500Mb	14" M/S	✔	✘	✔	£1089
✔	8Mb	500Mb	15" M/S	✔	✘	✔	£1149
✔	8Mb	500Mb	14" M/S	✔	✔	✔	£1099
✔	8Mb	500Mb	15" M/S	✔	✔	✔	£1159
✔	8Mb	800Mb	14" M/S	✔	✘	✔	£1139
✔	8Mb	800Mb	15" M/S	✔	✘	✔	£1199

POWERMACS

7200/75, 8/500

£869

£5.54 PER WEEK

- PCI Technology
- RISC CPU

RAM	MHz	HD	MONITOR	CD	K/B	Price
7200/75						
8Mb	75	500Mb	✘	✘	✘	£869
8Mb	75	500Mb	14" M/S	✘	✔	£1169
8Mb	75	500Mb	17" 1705	✘	✔	£CALL
7200/90CD						
8Mb	90	500Mb	✘	✔	✘	£1119
8Mb	90	500Mb	17" 1710	✔	✔	£CALL
16Mb	90	1000Mb	✘	✔	✘	£1399
16Mb	90	1000Mb	17" 1710	✔	✔	£CALL
7500/100CD						
8Mb	100	500Mb	✘	✔	✘	£1699
16Mb	100	1000Mb	✘	✔	✘	£1999
8500/120CD						
16Mb	120	2000Mb	✘	✔	✘	£2999
9500/132CD						
16Mb	132	2000Mb	✘	✔	✘	£3299
9500/132CDGR (with Apple Graphics Card)						
16Mb	132	2000Mb	✘	✔	✘	£3599

ADD... CLARIS WORKS 4 TO ANY POWERMAC ORDER AND ONLY PAY AN EXTRA £30 (+VAT)

POWERBOOK

190/66, 4/500

£929

JUST £6.68 PER WEEK

- NEW 190/5300s include PCMCIA & expansion bay

190/66 - 4/500 Mono	£929
190/66 - 8/500 Mono	£1145
190cs/66 - 4/500 Dual Scan	£1279
190cs/66 - 8/500 Dual Scan	£1489
5300/100 - 8/500 Mono	£1429
5300cs/100 - 8/500 Dual Scan	£1799
5300cs/100 - 16/750 Dual Scan	£2249
5300c/100 - 8/500 Active Matrix	£2379
5300c/100 - 16/750 Active Matrix	£2899
5300ce/117 - 32/1100 Active Matrix	£4449
DUO 2300c/100 - 8/750 Active Matrix	£2369
DUO 2300c/100 - 20/1100 Active Matrix	£3079

PowerBook 190 & 5300 Models include... • Route 66 • eWorld • Mobility Pack
PowerBook 190s also include...• Claris Works

BUY EITHER A POWERBOOK 5300 OR DUO AND GET... CLARIS WORKS 4 FOR ONLY £30 (+VAT)

THIS MONTHS Special Offers

APPLE POWERBOOK Model 540c 4/320	£1549		
TEXAS MICROLASER 2Mb Memory Upgrade	£135		
TEXAS MICROLASER 4Mb Memory Upgrade	£199		
SOFT WINDOWS 2.0 Software, 3.5" or CD	£199		
SUITCASE Software	£40	CINEMANIA 95/96 Software	£20
CLIP MASTER PRO Software	£10		
MORE KEY FONTS Software	£10		

CHECK OUT THESE BARGAINS!!!

PERFORMA OPTIONS

Video-In Card - 630/5200/5300/6200	£89	Video-In/TV Tuner Card - 630/5200/5300/6200	£219
Video-Out Card - 630/5200/5300/6200	£219		
MPEG FMV Video CD Playback Card for 630/5200/5300/6200 (Only fits 630 models without a DOS Card)	£175		
Personal Comms Solution for... 630/5200/5300/6200			
14400 Modem, send & receive software - FAX, ANSAPHONE, & INTERNET via eWorld. (Only fits models without a comms slot Ethernet Card)	£109		

Creditcharge

If you can't visit us personally, why not ask for an Application Pack for a convenient, flexible GH BUDGET ACCOUNT CARD. No Deposit and repayments over convenient periods can be arranged by mail. Once established, you can purchase with your new card and leave existing credit card limits intact!

We supply all Government and Education Departments along with Major PLCs. Call GH now for a rapid response to your Quotation requests!

Why don't you use our new... GH EMail Internet address gharwood@eworld.com

'FAST-FAX' GH for a Rapid Response to your Quotation Requirements!

GETTING THE BEST FROM THE UK's FAVOURITE APPLE RESELLER...

PHONE GH...
We accept all major credit/debit cards with NO TRANSACTION SURCHARGES.

POST OR FAX...
Please include your Name, Address and preferably daytime and/or evening telephone/fax number with your requirements. If using a debit/credit card include its number and valid from/expiry date (and issue number with Switch cards). Make cheques (please allow 7 days clearance), Drafts or P.O.s payable to Gordon Harwood Computers Limited.

GH PRICES...
All UK and EC customers please add VAT at the standard rate of 17.5% to all prices. UK overseas Armed Forces Personnel may be exempt VAT - please ask for details.

DELIVERY...
We offer prompt shipment with fully insured express delivery options throughout the UK, Europe and Worldwide at a very modest cost. If ordering by mail, please call to confirm delivery charges.

GH WARRANTY...
Manufacturers' standard warranties apply or, ask about GH's comprehensive extended options which are always recommended for professional users to minimise costly down time. Ask GH for full details.

PERSONAL FINANCE BUSINESS

GH PERSONAL FINANCE FACILITIES...

✦ PERSONAL FINANCE ✦ DEFERRED PAYMENT PLAN ✦ : FOR PERSONAL INDIVIDUALS[S] VISITING OUR SHOWROOM AVAILABLE ON PURCHASES OVER £500... PAY A MINIMUM OF 10% DEPOSIT NOW, THEN NOTHING MORE FOR 6 MONTHS! During that period you can settle IN FULL (without finance charges) or continue your agreement with normal interest arrangements (ie. Direct Debit APR 27.8%/2.07% per Month, Payment Book 32.4%/2.37% per Month). And... for the first 6 months you'll also receive FREE Agreement Life Cover. Written details available on request. [S]Subject to status and an £18 arrangement fee. Please contact us prior to visiting for Easy Application requirements.

GH BUSINESS FINANCE FACILITIES...

BUSINESS FINANCE : Weekly rates shown exclude VAT and are based on a fixed cost 3 Year Apple Commercial Credit Lease payable quarterly after an initial deposit payment. Available to all businesses (including recently established) making a minimum total purchase from GH of £750 - subject to status. FULL Details available on request.

Manufacturers' specifications and GH prices are correct at time of going to press; however, they may fluctuate and we therefore reserve the right to amend them - please confirm prices before ordering. This advertisement is an invitation to treat, not an offer to sell. Goods are not supplied on a trial basis. All transactions are subject to Harwood's Terms and Conditions of Sale, a copy of which is available on request. E.&O.E.

MONITORS

Budget 14" Multisync Monitor inc. Adaptor (.28)	£179
Apple 14" MultiScan (.28)	£225
Apple 15" Multiscan (.28)	£285
Apple 17" 1705 MultiScan (.28)	£CALL
Apple 17" 1710 Trinitron MultiScan (.26)	£CALL
Apple 17" Trinitron 1710AV MultiScan (.26)	£CALL
Apple 20" Trinitron MultiScan II (.26)	£1249
NEC 14" XV Multisync (.28)	£225
NEC 15" XV Multisync (.28)	£289
NEC 15" XE Multisync (.28)	£409
NEC 17" XV Multisync (.28)	£569
NEC 17" XE Multisync (.28)	£719
NEC 17" XP Multisync (.28)	£959
Sony 15" SX1 Trinitron Multisync (.26)	£309
Sony 15" SF2 Trinitron Multisync (.26)	£339
Sony 17" SF2 Trinitron Multisync (.26)	£549
MAG 17" Toshiba Multisync (.28)	£449
MAG 17" Trinitron Multisync (.25)	£599

DISPLAY UPGRADES

24-BIT Accelerated Graphics Card for £359
PDS Macs... For LCIII/475/630/5200/5300/6200
(Allows 4096x1536 resolution on 21" Monitors at 8 Bit or 17" Monitors at 24 Bit)

External Monitor Connection - 5200/5300 £29

Ask us about VRAM (Video RAM) for your Mac...
Add a VRAM upgrade to give your monitor higher resolutions, more colours etc. CALL GH NOW!

SCANNERS

UMAX

Model	Photoshop	Transp. Adap.	Price
VISTA S6e	✘	✘	£275
VISTA S6e	LE	✘	£299
VISTA S6e	FULL	✔	£799
VISTA S8	LE	✘	£499
VISTA S8	FULL	✘	£599
VISTA S8	FULL	✔	£899
VISTA S12	LE	✘	£575
VISTA S12	FULL	✘	£689
VISTA S12	FULL	✔	£975
GEMINI	LE	✘	£779
GEMINI	FULL	✘	£899
GEMINI	FULL	✔	£1199
POWERLOOK II	FULL	✘	£1999
POWERLOOK II	FULL	✔	£2299
MIRAGE A3	FULL	✔	£5595

Transparency Adaptors *(Quote model on order)* £422
TextBridge bought with any Umax scanner £39

EPSON

Model	Photoshop	Textbridge OCR	Price
GT 5000	LE	✔	£329
GT 8500	LE	✔	£499
GT 8500	FULL	✘	£679
GT 9000	LE	✔	£599
GT 9000	FULL	✘	£799

Transparency Adaptor... £418
FOR 6000, 6500, 8000, 8500 and 9000 models
(Please quote scanner model requirements with order)

PAPERPORT

Visioneer Paperport for Mac £204
Visioneer Paperport VX for Mac £249
(Both come with WordScan OCR Software)

CAMERAS

Scitex Leaf Lumina Digital Electronic Photo Scanner/Camera with 35mm Slide & Tranny Scanning £2999
Apple QuickTake 150 £379
Connector Kit for second Mac or a PC £48
QuickTake Carry Case £40
Connectix QuickCam £79

WACOM TABLETS

Artpad II... £119 **Artpad II with Dabbler...** £150
Ultra Pad... A5 - £255, A4 - £355, A3 - £555

KEYBOARDS

Third Party Design Keyboard	£40
Apple Design Keyboard	£76
Apple Extended Keyboard	£135
Apple Adjustable Keyboard	£160

PRINTERS

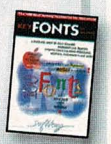
LASERS...

Apple Personal Laser 300 - 300dpi Mono	£415
Apple Laser 4/600PS - 600 dpi Mono	£589
Apple Laser Select 360 - 600 dpi Mono	£989
Apple Laser 16/600 - 600 dpi Mono	£1549
Apple Color LaserWriter 12/600PS 600 dpi Colour and Mono	£4999
TI Microlaser 600 - 600 dpi Mono - 2Mb	£569
TI Microlaser 600 - 2Mb RAM Upgrade	£135

INKJETS...

Apple StyleWriter 1200 Mono 720 x 360dpi	£185
Apple StyleWriter 2200 Colour 720 x 360dpi	£269
Apple StyleWriter 2400 Colour 720 x 360dpi	£295
Epson Stylus Colour II 720 x 720dpi	£289
Epson Stylus Pro XL Colour - A4 720 x 720dpi	£399
Epson Stylus Pro XL Colour - A3 720 x 720dpi	£899
Epson Stylus Pro POSTSCRIPT RIP	£179
HP 340 DeskWriter Mono 600 x 300dpi	£209
HP 600 DeskWriter Mono 600 x 300dpi	£209
HP 660C DeskWriter Colour 600 x 300dpi	£269
HP 850C DeskWriter Colour 600 x 600dpi	£349
NEC SuperScript 3000 - HIGH QUALITY COLOUR	£575
PowerPrint Use parallel printers with Macs	£79
StyleScript Adobe PostScript RIP	£75

THE GH *Printer* BONUS
100 FREE FONTS WITH EVERY PRINTER FROM GH!
(either TrueType or PostScript Type 1 to suit your new printer)



CONSUMABLES

StyleWriter... I/II/1200 StyleWriter 2400	Black Cartridge	£14
	Black Cartridge	£21
	Colour Cartridge	£24
	Black Ink Tank	£6
	Colour Tank	£12
Colour StyleWriter Pro	Black Hi-Capacity Cartridge	£9
	C, M, or Y Cartridge (each)	£8
	CMYK - 4 Colour Set Cartridge	£30
Epson Stylus	Black Cartridge	£11
	Colour Cartridge	£24
Epson Stylus II	Black Cartridge	£15
	Colour Cartridge	£22
Epson Stylus A4 Paper	360dpi Paper, 100 Sheets	£12
	720dpi Paper, 100 Sheets	£16
HP 340 DeskWriter	Black Cartridge	£18
HP 600/660 DeskWriter	Black Cartridge	£18
	Colour Cartridge	£20
Genuine Apple Toner Cartridges		
For Apple LaserWriter 300, 320, 4/600		£49
For Apple LaserWriter 360		£81
For Apple LaserWriter 16/600		£90
Toner Cartridges - For MOST other Lasers stocked -		£Call

STORAGE

INTERNAL HARD DRIVE		EXTERNAL HARD DRIVE	
D2, 850Mb	£159	D2, 850Mb	£199
D2, 1Gb	£199	D2, 1Gb	£249
D2, 2.1Gb	£479	D2, 2.1Gb	£529

IOMEGA 100Mb ZIP Drive - inc. Cartridge	£165
ZIP Drive 100Mb Cartridge	£15
Formac 88Mb Syquest Drive - inc. Cartridge	£204
Formac 200Mb Syquest Drive - inc. Cartridge	£299
Formac 270Mb Syquest Drive - inc. Cartridge	£349
Formac 230Mb Optical Drive - inc. Cartridge	£379
Formac 1.3Gb Optical Drive - inc. Cartridge	£949
D2 88Mb Syquest Drive - inc. Cartridge	£239
D2 200Mb Syquest Drive - inc. Cartridge	£329
D2 270Mb Syquest Drive - inc. Cartridge	£379
D2 230Mb Optical Drive - inc. Cartridge	£399
D2 EZ135 135Mb Syquest Drive - inc. Cartridge	£189
D2 EZ135 135Mb Cartridge	£14
SYQUEST CARTRIDGES... 44Mb £29 88Mb £34 200Mb £52 270Mb £40	230Mb OPTICAL DISKS... £20
NEW YAMAHA CD WRITER Double Speed Write, Quad Speed Read including Toast Software	£799
NEW SEVEN CD CHANGER Double Speed, 7 CDs always available on demand! SCOOP PURCHASE!	£249

CD ROM DRIVES

NEC 300e CD Double Speed with FREE... Speed Enhancer Software	£99
NEC 300e CD As above with 10 CD Pack!!!	£115
Apple CD 300e Plus Double Speed	£179
D2 CD 600e Quad Speed	£179
Apple CD 600e Plus Quad Speed	£219

COMMS

Supra 144LC Plus	£89
Apple GeoPort for AV/Power Macs - 14400	£94
US Robotics Sportster Mac 'n' Fax - 14400	£117
Motorola 3400 Pro V34 - 28800	£145
US Robotics Sportster 288 V34 - 28800	£174
Supra 288 Fax Modem - 28800	£175
Global Village TelePort Platinum - 28800	£220
Apple Personal COMMs Solution - 14400 *(For 630/5200/5300/6200, see 'Performa Options' below left)*	£109
NEW... Psion Dacom Gold Card - PCMCIA	£219

Get on the Net... FREE INTERNET SOFTWARE and eWorld with ALL GH Modems! Includes Web Browser, FTP Access, Access to News Groups, File Downloading etc.

DOS CARDS

PRICE CRASH!

Apple PC 486 DX2 66MHz Hardware PC Card with DOS 6.2 for the Powermac 6100 £169
Orange Micro 486DX2 66MHz PC Card with 4Mb RAM for Macs with NUBUS fitting £749
Orange Micro 486DX2 66MHz PC Card with 4Mb RAM for Macs with PCI fitting £829

RAM UPGRADES

SIMMs... 4Mb £87 8Mb £169 16Mb £299 32Mb £680
DIMMs... 4Mb £119 8Mb £205 16Mb £349 32Mb £799
Call for details/prices of RAM Cache upgrades

MAC SOFTWARE

Quark Xpress 3.3	£679	Hypercard 2.3.1	£94
Adobe Illustrator 5.5	£279	Maths Workshop	£28
Adobe Photoshop 3.0	£399	Creative Writer & Fine Artist	£39
Adobe Collection	£549	Wine Guide '95	£24
KAI's Power Tools	£95	Encarta '96	£39
KPT Vector Effects	£95	Groliers Ency. Science Fiction	£30
KPT Power Photos	£95	Cinemania '95/'96	£35
KPT Convolver	£95	Kid Pix 2	£26
KPT Bryce	£95	Dorling Kindersley...	
Aldus Freehand 5.0	£319	The History of the World	£25
Claris Works 4.0	£94	The Way Things Work	£38
Claris Draw	£95	Incredible Dictionary	£25
Claris Impact	£95	Encyclopaedia of Science	£38
Filemaker Pro	£89	Encyclopaedia of Nature	£38
Filemaker Pro 3	£159	Ultimate Human Body	£38
Microsoft Office	£359	World Reference Atlas	£43
Microsoft Word	£245	P.B. Bears Birthday Party	£25
Microsoft Excel	£245	In the First Degree	£33
M.Y.O.B. Accounts	£149	Ultimate Doom	£Call
MacMoney	£82	The Dark Eye	£30
After Dark 3.5	£25	Endorfun	£23
Apple PC Exchange	£39	Entomorph	£34
Apple Personal Diagnostics	£68	Rebel Assault II	£35
Apple Sys 7.5 - 3.5" or CD	£59	Doom II	£32
Norton Utilities	£74	Descent	£26
Suitcase	£49	Red Shift 2	£34
SoftWindows 2.0 3.5" or CD	£199	Alone in the Dark II	£29
Conflict Catcher	£52	SIM City 2000 Compilation	£35
VIREX - Anti Virus	£59	You Don't Know Jack	£26
SAM	£54	F/A - 18 Hornet V2	£45
SAM (Inc. Updates for 1Year)	£109	Myst CD	£32
RAM Doubler	£38	Marathon II	£40
Speed Doubler	£38	Dark Forces	£35
RAM & SPEED Doubler PACK	£54	A-10 Attack	£38
Clip Master Pro	£13	Dungeon Master II	£28
Key Fonts	£13	Casper	£16
More Key Fonts	£13	LOTS MORE SOFTWARE	Call GH

ACCESSORIES

Apple Design Speakers II	£49
Apple Desktop II Ergonomic Mouse	£35
Kensington Turbo Mouse V4	£59
Kensington Thinking Mouse	£51
MacAlly Mouse	£17
MacAlly Joystick	£52
MacAlly Game Pad	£22
Jet Stick	£38
Flight Stick Pro	£68
Mouse Mechanic Maintenance Tool	£5
GH Quality Mouse Mat	£5
3.5" Disk Head Cleaner	£2
10 - TDK/Sony 3.5" HD Blank Disks	£6
50 - TDK/Sony 3.5" HD Blank Disks	£30
SPECIAL - GH ESSENTIALS PACK: *10 3.5" HD Disks, Mouse Mechanic, Disk Head Cleaner and Mouse Mat*	£17
SPECIAL - GH ESSENTIALS PLUS PACK: *As above PLUS Apple 1 Year On-Site Maintenance*	£30
APPLE 1 YEAR ON-SITE MAINTENANCE	£15

NEWTON

NEWTON 120 Mk II - 2Mb	£399
NEWTON 120 Mk II - 2Mb + Software Pack	£409
Newton Keyboard	£65
Newton 1Mb Storage Card	£55
Newton 2Mb Storage Card	£105
Newton 4Mb Storage Card	£185
Newton Connection Kit - Mac	£45
Newton Connection Kit - Windows	£45
Leather Carrycase - 110/120	£36
Mains Recharger Cradle - 110/120	£49
Nicad Battery Pack - 110/120	£15
Newton Press - Software	£49
Tapworks - Software	£51
Graffiti - Software	£39

GH is a family business established in 1955, supplying systems since 1982. With over £40 million worth of units supplied, and a quarter of a million happy customers, our trading record leaves others standing!

THE GH Charter

SO, HOW DO YOU DECIDE WHERE TO BUY YOUR APPLE EQUIPMENT?

That's the question we asked in a recent survey. When given a choice of ten categories, customer '**TOP THREE**' priorities were...

No. 1 PRICE
At GH you'll get the BEST overall deal... Look at our prices, combine them with our service, and you'll see we're Number 1 for... **No's 1, 2 & 3!**

No. 2 SERVICE
We're an Apple Authorised Service Provider, this speaks for itself.

No. 3 PRODUCT CHOICE
Everything for your Mac. If it's not listed just phone and tell us what you need!

Authorised Reseller,
Commercial Credit & Service Provider

Appointed for high standards in Apple Hardware Maintenance & Care

Whilst our standard warranty cover is comprehensive, we also offer enhanced and extended warranties too. If your Mac is an essential part of your business, you may require a fast collection or on-site response service for minimal down time. Ask for details and choose the option that suits your needs best. Our 'Gold Service' is priced from as little as £10!

Lifetime Warranty Plan *for equipment used at Home (ie not on commercial premises)...Add an extended warranty to any hardware from GH. Take up to 5 yrs cover and at the end of that period extend again on an annual basis, you get a lifetime's peace of mind. Schemes even cover for accidental damage as well as break down. Fully transferable should you wish to sell your equipment so enhancing resale values. Even available on certain hardware purchased elsewhere. Phone GH for details.*

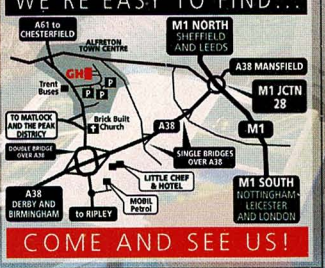
Equipment under Apple warranty, *can be collected for service... even if it was purchased elsewhere! We are also happy to quote for out of warranty hardware repairs and service, no matter how old the product may be. Call GH for details.*

VISIT OUR SHOWROOM...
We are often told our showroom is the best in the UK. So why not visit us in scenic Derbyshire and see for yourself the vast range we have on display, all at mail order prices, off the shelf!

WHY NOT MAKE IT A DAY OUT?
FREE TOURIST *i*
Ask for our Tourist Information Leaflets which cover the many local natural and special attractions, from quiet country walks to historic sites and exciting modern theme parks.

IT'S ONLY A SHORT DRIVE... EVEN FROM LONDON
We're open Monday to Saturday 9.00am until 5.00pm...

WE'RE EASY TO FIND...



COME AND SEE US!

ALL PRICES EXCLUDE VAT

All GH Printers, Monitors, Scanners and Storage Devices are supplied with Standard Desktop Mac Cables FREE!
(PowerBook users - ask for cable details/prices)

Access VISA Creditcharge DELTA SWITCH

For your protection all Credit Cards are Security Checked

Phone Gordon Harwood Computers

01 773 83781

Dept. M A F /T3 New Street, Alfreton, Derbyshire. DE55 7BP FAX: 01 773 831040

0800 765432

16GB turboDAT £728

inc Retrospect 3, installation kit

MacUser Awards 1993 WINNER

4-16 triple DAT, D enclosure

new!

tape	external	media
4-16 quad	£948	£16
4-16 triple	£898	£16
4-16 Turbo	£728	£16
4G Turbo	£678	£16

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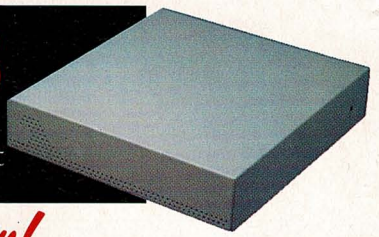

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WAVE

Apple's new chief: the man and his options analysed; Apple makes education deal with Acorn. News Editor: Richard Hill.

Apple fights back with new boss at helm

Apple has taken dramatic steps to ensure its prosperity and to silence the speculation about its sale. Dr Gilbert Amelio has been made the new head of the company's day to day operations.

Amelio's appointment follows poor financial results for the firm during last year's busy Christmas season, with ferocious competition from its biggest rivals and poor estimation of the demand for different types of Macs hitting Apple hard.

Amelio replaces Michael Spindler, who no longer seemed the rising star he proved to be during the vital period when he successfully oversaw the delicate transition from the Mac's old main processor chip family to the PowerPC used in PowerMacs.

More recently, Spindler's reputation had suffered after a series of setbacks lowered morale in the company. These included an underestimation of demand for PowerMacs during 1995, which led to a $1,000 million backlog in orders for the machines; and intense speculation that the firm would be sold in the wake of its loss during Christmas – despite setting a new record for sales of Macs.

Just as significant was Amelio's simultaneous appointment as chairman of Apple's board of directors. Previous chairman AC 'Mike' Markkula, long seen as the power behind the throne at Apple, has stepped down to vice-chairman to make Amelio the undisputed helmsman.

Michael Spindler was removed after Apple took drastic action to turn the company around.

The new man in charge at Apple is Dr Gilbert Amelio, who has the challenging task of making the firm more efficient and competitive – without losing the magic that makes the Mac such a great computer.

Amelio will receive a salary of $990,000 (£639,000) a year, plus bonuses that could take his total pay up to $2.5 million (£1.6 million).

The new boss's first public action was an attempt to dampen the gossip and restore confidence. A company statement made it explicit that it was not talking with any other firms about a possible merger: It said: 'It has been our long-standing policy not to comment on either rumour and speculation, and that continues to be the case. Because of the destabilising effect recent rumours and speculation have had on our business and our organisation, we have decided in this one instance, however, to make an exception to our policy.' The statement also made it clear that Apple faces some tough times immediately ahead. After its loss of $69 million over Christmas, a bigger loss between January and March is predicted, as the firm gets to grips with making itself more efficient.

Amelio stated: 'I want to emphasise my strong belief... that the foundations of our business are strong and that Apple Computer has the ability, determination and staying power to deal with current challenges, and to move forward with confidence into the future.

'I fully expect that our customers' grandchildren will be buying Apple products,' he concluded.

■ Turn over the page for more details on Gil Amelio's plans for Apple.

MOTOROLA JOINS THE MAC TEAM

Motorola, the maker of the chips used in PowerMacs, has licensed the Mac OS from Apple. It is now able to build machines that can use the operating system, and can also approve other firms to use it if they buy PowerPC chips. The deal increases the likelihood of a Mac OS explosion when the PowerPC Platform launches later this year.

Continued on next page

Amelio says: 'Going back to our roots'

Barely two weeks into his new job at the head of Apple, Gil Amelio met the press for the first time in February. There was no earth-shattering news: 'I am in the sponge mode,' he said. 'I am soaking up as much information as I can. After two weeks, I am hardly an expert to make major announcements.'

Amelio's intention for this first early meeting was instead to make a few basic things clear. First, that Apple is not for sale. 'And I don't see anything in the foreseeable future that will change that. We are going to be fine. We just have to go about the job of house cleaning,' he said.

The sorting out may include some more job cuts, said Amelio, but he didn't see any need for any more measures like the recent axing of 1,300 posts. Apple's most immediate moves will be to settle some nerves. 'There has been so much speculation in the press that it scared the hell out of our customers – that's our biggest problem. We have not adequately communicated with our customers.

'What you can expect to see during these first 100 days is us coming forward and articulating our position and strategy for the company... that will say where we intend to take the company in the future.'

Amelio's first thoughts on what Apple's broader direction should be echo his predecessor Michael Spindler's in many ways. Licensing of the Mac OS to other companies will continue, as well as playing to the Mac's strengths in areas such as design, multimedia and education. But Amelio also offered a vision of the Apple of the future: 'We are going back to our roots. We're a company that takes computer technology and makes it simple, makes it accessible, makes it delightful and helps you to be productive.

'Today, we have had to get know the computer. In the future, the computer's going to have to know us.'

The new face behind the Mac OS: Gil Amelio brings solid engineering knowledge and a pragmatic business attitude to his new post at Apple.

EXPONENTIAL ON COURSE

The firm behind the revolutionary redesign of the PowerPC chip is now official. IBM has granted Exponential a licence to continue development of the design that should make the PowerPC platform easily the fastest personal computer in the world. And Exponential and Motorola have agreed to share their ideas and concepts. Apple is one of the names behind the new company. See MACFORMAT 34's News for more details.

PROFILE: THE MAN AND HIS OPTIONS

It's a BIG JOB!

The current PowerMacs, with PCI expansion slots and removable main processor chips, are the first indication of Apple's bright PowerPC future.

Gil Amelio comes to Apple from the National Semiconductor Company, a maker of computer chips. It was here that he cemented a reputation for revamping troubled businesses, taking the firm from the point of bankruptcy to record profits and a glowing future.

Amelio has a PhD in chip research and an excellent knowledge of computer engineering, holding 16 technology patents himself. He began his impressive career at the world-renowned Bell Laboratories research site owned by AT&T.

His first task at Apple is to assess the company as a whole, perhaps taking painful steps to get the firm's finances back on track. More redundancies to follow the 1,300 announced recently by his predecessor Michael Spindler are an option, as is selling off part of the firm, such as the Newton pocket computer division. Amelio also needs to find the right combination of staff to move Apple forward, particularly on the administrative side, where several important people have left in recent months. Amelio then faces the more profound challenge of setting Apple's future direction over the next few years. Apple is currently moving from carrying the weight of supporting the Mac and its operating system entirely on its own shoulders, but is bringing in partners by allowing them also to build computers that can use the Mac OS.

This trend is likely to grow in momentum later this year and in 1997, as the Power PC Platform computers go on sale. These will be easier to build than Macs and can use other operating systems apart from the Mac OS, making them highly attractive to the huge business market where Apple is weakest at the moment.

At the other extreme, there is huge potential for computers in the home as ideas like the Internet and multimedia gather popularity. Computers may have to be designed differently from the Macs you know well, to appeal to as wide an audience as the video recorder or camera does. The next few years promise a lot of potential for thrilling opportunities for Apple and Amelio, but he must set a course through some stormy waters first.

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Macintosh PowerBook

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Price quoted applies to Powerbook 190 4/500. Apple dealers are free to set their own prices, therefore price may vary from that indicated.

Apple and Acorn form dream team

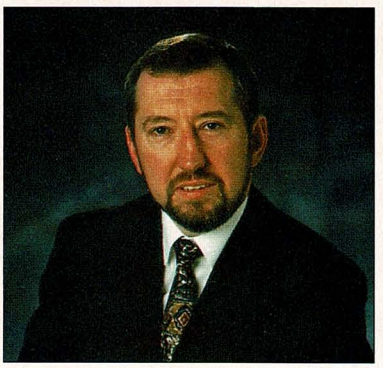
If your school uses Macs, your choice of machines is soon to increase as a result of a deal between Apple and Acorn, Britain's top supplier of computers to schools. A new, and as yet unnamed, company is to sell both Apple equipment and Acorn machines to schools, boosting the potential market for both firms.

Soon your school's Macs will work better with Acorn's own computer (below).

The arrangement is part of a wider agreement between Apple and Olivetti, a major force in the computer industry, to develop links across all of Europe between computers and educators. Olivetti has licensed the Mac OS as part of this plan, enabling Acorn and it to produce computers able to run Mac programs in the future. But Olivetti has no public plans to build its own Mac-compatible computers for the moment, only to support Acorn's efforts in education.

Acorn has sold more than 400,000 of its latest computers, a broad equivalent of the PowerMac in that it takes the Acorn operating system RISC OS onto a new type of machine with a more advanced chip than its predecessors. While this hardly compares with Apple's three million PowerMacs, Acorn's main strength is in British schools, where it has reigned ever since the 1980s – the days of the BBC Micro. The company's education connections can only improve Apple's standing in schools.

New products will mean you'll be able to swap information between the wholly different machines more easily.



Brendan O'Sullivan heads the new firm that will sell Macs and Acorns to schools across the UK.

Education software companies that support Acorn will be encouraged to write for the Mac, increasing the number of Mac titles. And later on, the new firm will sell computers from both firms to be based on the forthcoming PowerPC Platform.

This is a partnership rather than a merger, in the spirit of the pair's existing successful joint venture, Advanced Research Machines, which makes the chips used in Acorn machines and Apple's Newton pocket computers.

Web creators fight censors

Hundreds of World Wide Web publishers have joined together in a campaign to protest moves by the United States Government to regulate the Internet.

The US 1996 Telecom Bill going through Congress is intended to restrict the transmission of what it regards as 'indecent material'; but many Net users see it as removing their right to free speech. Although the legal moves apply only to the US, the bill will restrict the freedom of Net users across the world.

The bill is being challenged in law courts; and in a campaign organised by the Electronic Frontier Foundation many prominent Web sites such as Yahoo, Webcrawler and Netscape have spoken out against the law by making their pages black for a weekend.

For more details, point your Web browser at **http://www.eff.org/** This site also has information about the growing Blue Ribbon campaign for protecting on-line freedom of speech.

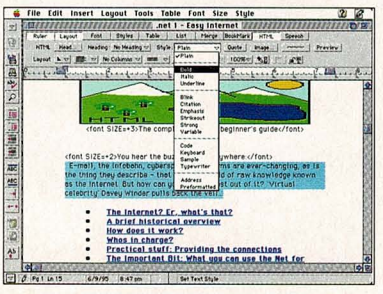
NEXT GEN MAC WORKS!

Apple has demonstrated in public the Mac Operating System (OS) running on the PowerPC Platform computer due to appear later this year. The combination of the IBM prototype and System 7.5 ran *Photoshop* and other flagship Mac programs with minimal hitches for the unfinished project.

Corel snaps up WordPerfect

Responsibility for *WordPerfect*, the popular word processor, has gone to Corel in a major deal with previous owner Novell. Corel will sell *WordPerfect* and has plans for future versions.

WordPerfect is now up to version 3.5 and has been praised for its elegant design: as a powerful word processor, it's the main rival to Microsoft's market-leading *Word*.


File Edit Insert Layout Tools Table Font Size Style
The Internet? Er, what's that?
A brief historical overview
How does it work?
Who's in charge?
Practical stuff: Providing the connections
The important bit: What you can use the Net for

WordPerfect now forms the core of Corel's push into the Mac market, with more to come soon.

Although Corel is not well known for its support of the Mac, mainly publishing for the PC-compatible computer, it has been moving in our direction. Its flagship *CorelDraw* graphics program is set for its first Mac version this summer, and its entire selection of multimedia titles – including *Wild Cards*, *Red Rhino* and *The Corel All-Movie Guide* – is out on the Mac.

The deal, which includes other software not on the Mac, is in the form of shares and cash worth around $185 million, although two years ago Novell had paid $1,000 million for the same software. Novell had been seeking to sell on the ownership rights to concentrate on its successful network products for big businesses.

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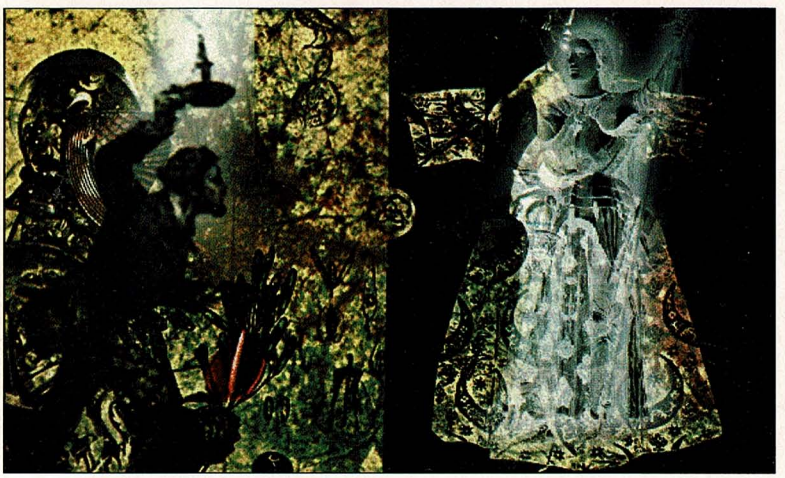
WHAT'S NEW

Award-winning multimedia and ambitious changes to the Internet lead our latest product bulletin. Plus: programming made easier and a look into the roots of jungle. Compiled by Richard Hill.

Macmillan Interactive

It's barely released its first CD-ROMs, and already one of Macmillan's programs has scooped one of the biggest awards in the computer industry. Not bad for a beginner.

Scrutiny in the Great Round picked up the Milia D'Or Grand Prix at the recent Milia multimedia festival in Cannes. Taking the collage artwork of Tennessee Rice Dixon as a starting point, the ambitious disc roams through paintings, cinema, poetry and music in an attempt to understand the place where body and soul meet. You have three controls that work in combination to give you many different ways of negotiating the flow of ideas and concepts.



Scrutiny in the Great Round won the top prize at the recent Milia multimedia festival. It explores the common ground between art and computing.

Robert Winter is a musician and college professor, with some well-regarded CD-ROMs already under his belt – including an analysis of Stravinsky's *Rite of Spring* (for Microsoft). His *Crazy for Ragtime* studies this music at the height of its popularity early this century, as typified by songs like Scott Joplin's *The Entertainer.* Alongside documentary material, there's the chance to play ragtime tunes, learn how they're constructed, and then put your own together using hundreds of short phrases.

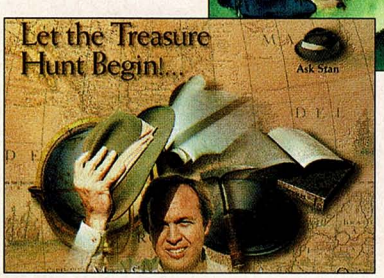
In children's title *The Great Green Mouse Disaster,* a quiet hotel that's due to host the Great Green Mouse Orchestra is tipped into chaos when the mice escape. Your job is to help track them down and match them with their instruments before they wreck the place. Behind the mayhem you get a chance to learn about how the instruments in an orchestra work together.

Young children just learning to read are invited to *Henry's Party,* where your porcine host welcomes you to such activities as join-the-dots, basic counting and painting. It also acts as an introduction to using multimedia.

This assortment is joined by other titles, including the adventure-seeking *Lost Treasures of the World* and languages for beginners in *Breakthrough French.* This aggressive move into multimedia from such a large book publisher is certainly a sign of changing times in publishing.

- **Prices: from £24.99 to £44.99.**
- **Out: April.**
- **Contact: Macmillan Interactive on 0171 881 8000.**

Henry's throwing a party and you're invited – as he's a pig, you get to discover the farmyard.



It's *Raiders of the Lost Ark* for real as you go off in search of *Lost Treasures of the World.*

Precocious mice escape to cause mayhem at a sleepy hotel in *The Great Green Mouse Disaster.*

THE LATEST MULTIMEDIA

Between Earth and the End of Time

This grand title belongs to the first CD-ROM from fantasy book publisher Dragon's World. *Between Earth* explores two decades of work from the fantasy artist Rodney Matthews, seen on the covers of many an epic book trilogy. The disc features finished illustrations and sketches, plus video and puzzles based on Matthews' images. All of this is accompanied by a Rick Wakeman soundtrack.

Two CD-ROMs with variations on a single theme join *Between Earth* in the new Dragon's World line-up. *Ideas That Changed the World* and *Events That Changed the World* look at the growth of human society and the influences that shaped it. The discs cost between £18.95 and £40 and are all out this month. Contact Dragon's World on 0171 630 9955.

Haunted House

Don't go behind the door! Witches, ghosties and black cats abound in *Haunted House*.

A charmingly spooky adventure for young children, *Haunted House* is based on the book by illustrator Jan Pienkowski. He's the man behind the joyful *Meg and Mog* series. It's out this month for £24.99. Contact Philips Media on 0171 911 3000.

A to Zap!

Designed to help children learn to read, *A to Zap!* is a talking alphabet that teaches you about spelling right from the very basics of fitting letters together to form words. Each letter contains a different activity – for example, H is for a Hammer that helps kids practise their spelling – with parents able to add their own words into the lessons. Although it was created in the United States, *A to Zap!* has been adapted to cover those important details, such as pronouncing 'zed' instead of 'zee'. The CD-ROM costs £34.99 and includes a £10 voucher you can donate to your school so it can buy software. Contact ABLAC Learning Works on 01626 332233.

It's a jungle out there

Cutting edge dance music hits the Mac with *Junglism*, a documentary about jungle, the new 'beat music' craze that's 'topping the pops' with artists like Goldie and Baby D. Tripping around nightclubs, you'll meet jungle acts including Cutty Ranks and Leviticus, as well as finding out about the record labels and DJs that make the scene happen. Man. You can choose between a £14.99 Video CD, which you can play on your Mac if it has Apple's MPEG video card; or a full-blown £24.99 CD-ROM with extra interactive bits like a mixing studio. Contact Zone UK on 0171 250 3040.

Netscape Navigator 2.0

The evolution of the Internet has moved into a new era with software that can send sophisticated multimedia across the Net, then play it on your Mac. The latest version of the World Wide Web browser *Netscape Navigator* is at the heart of this development.

Netscape 2 adds many new features to its basic ability to load and display pages from the Web. In particular, a new plug-in system means that other companies can write sub-programs that will work with *Netscape* to add extra functions, some of which promise to transform the sort of graphics that can appear on a Web page. You'll get pages with animations and even control interfaces, much like the ones you find on CD-ROMs.

Two plug-ins in particular promise to change the way you use the Web. *Shockwave* is from Macromedia, the maker of multimedia authoring program *Director*. You can use these two together to create multimedia programs for the Web, whether simple animations or more ambitious interactive projects. You can then view them using the free *Shockwave* plug-in for *Netscape 2*. The programs written with *Shockwave* still have to be small so you can load them across the Web reasonably quickly, but Macromedia claims this format will condense down, making some animations smaller than still images. You can get an unfinished but working version of Macromedia's *Shockwave* plug-in from **http://www.macromedia.com/**

Sun Microsystems' *Java* plug-in is due by the summer, around the time that *Netscape 2.1* arrives. It is able to run small programs called applets (no relation to any other Apples), whose functions are limited only by the imagination and skills of programmers – word processors and games are just a couple of possibilities. Java is a complex programming language that takes some getting into, but you don't need any of this knowledge to run the results. You can find out more about Java at **http://java.sun.com/**

Netscape 2 also adds features like an easier bookmark system to help you compile references to the sites you visit regularly, and quicker page display. It costs $49, although it's free if you work in education or for a non-profit organisation such as a charity. You can also play around with the program for 90 days without paying by pointing your current Web browser to **http://home.netscape.com/** to get a try-out copy; or order a boxed copy from Netscape in France on 00 33 1 46 92 27 25.

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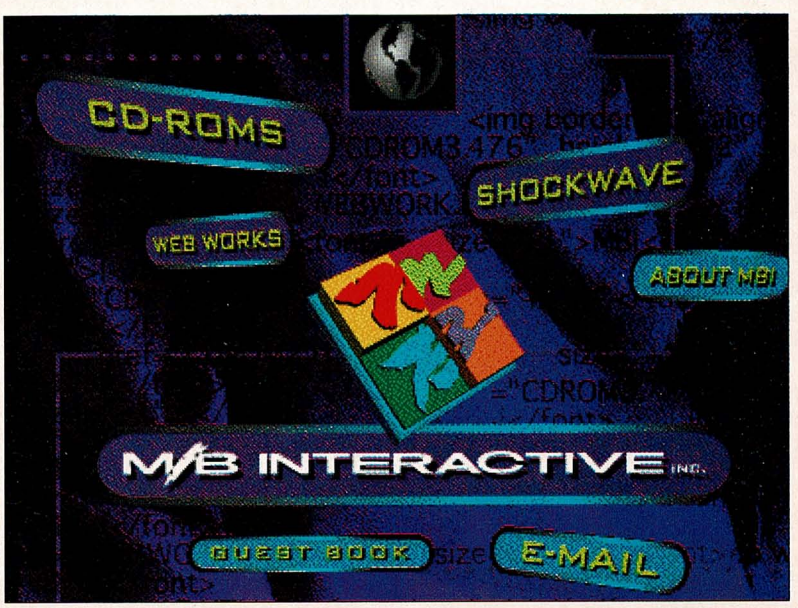
BUSINESS APPLICATIONS
GENERAL STORE
ASSISTANCE
COMMUNITY
NEWS & REFERENCE
How to
Go Back
Using Frames
Document: Done

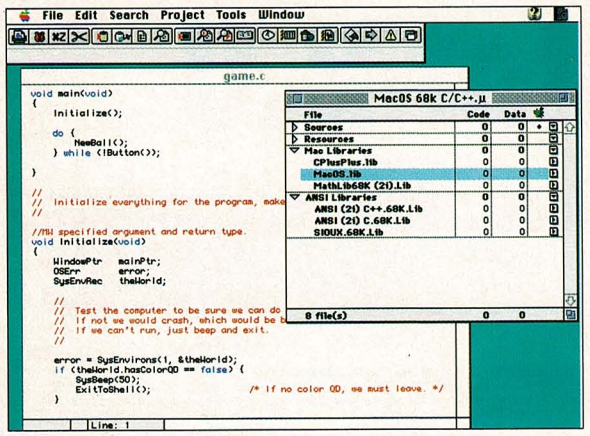
Netscape's own Web site shows off the features of its new program, including the ability to divide the screen into frames.

Continued on next page



Already sites that exploit the multimedia potential of *Shockwave* are appearing on the Web, including this menu screen with flashing signs.

Discover Programming



Learn the system the pros use – C's complicated, but *Discover Programming* makes it easier.

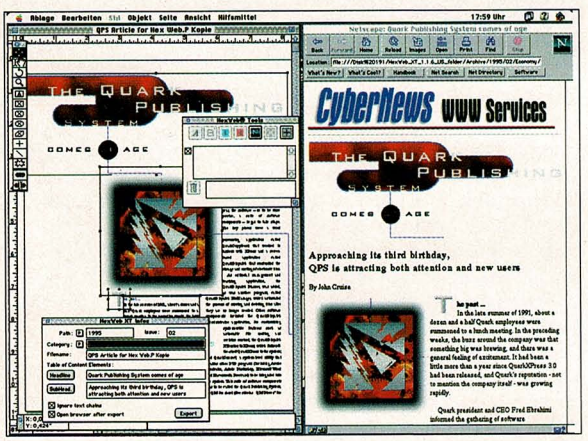
The name says it all, really. Metrowerks' *Discover Programming* is an introduction to the notoriously difficult art of writing computer software with a programming language. This £70.45 CD-ROM (plus £7.50 shipping) contains the CodeWarrior C/C++ and Object Pascal software development tools for the 68K Mac – non-PowerMacs, in other words.

Programmers write the software you use every day using tools like C and Pascal – they could use an authoring tool like *Director* or *HyperCard* instead, but they'd have less control over the design of their work, and a language like C gives you a much faster program when it's run.

C is used to create almost everything from word processors to the latest smash game, and programmers who have mastered working with it are in great demand.

The four manuals that come on the CD guide you through the basics of programming using the kits provided. It also includes other firms' tools and demos to show you what additional help is available. For details, contact Full Moon Software on 01628 660242.

HexWeb XT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Approaching its third birthday, QPS is attracting both attention and new users

HexWeb XT is an XTension that helps you convert your *QuarkXPress* documents (left) into pages for the Web (right).

HexWeb XT is an XTension – an add-on program that works with the leading Desktop publishing software *QuarkXPress* – to help you create pages for the World Wide Web. The XTension automatically loads at the same time as *XPress*, and converts *XPress* pages into HTML pages ready for the Web. *HexWeb XT* is designed to convert magazines and brochures, creating a Web table of contents, and supporting the new features in *Netscape 2*. For more details of the £410 package, contact XChange International on 0171 637 2966.

PowerBook deals

Apple has cut the prices of its PowerBook 190 computers by around 10%. You can now buy a portable Mac for less than £1,200. The 190 uses the old-style 68LC040 chips rather than the PowerPC chips found in other current PowerBooks. As part of the deal you also get the latest PC Card expansion slots for extra memory or even an extra disk drive, as well as a smooth trackpad control device.

The estimated price of a black-and-white 190 with 4Mb of memory and a 500Mb hard drive is £1,170, while you should find a colour 190cs with 8Mb of memory for £1,863.

If you're looking for a PowerPC-fitted PowerBook 5300, you can get a free modem worth £282 if you buy one before Sunday 31 March. The TDK modem connects your portable Mac to the Internet (or a BBS or other on-line service) at a very healthy 28,800 bits per second and, unusually, it's approved for use in 17 countries. The estimated price of the 5300 range starts from £2,248. For more details contact Apple on 0800 127753.

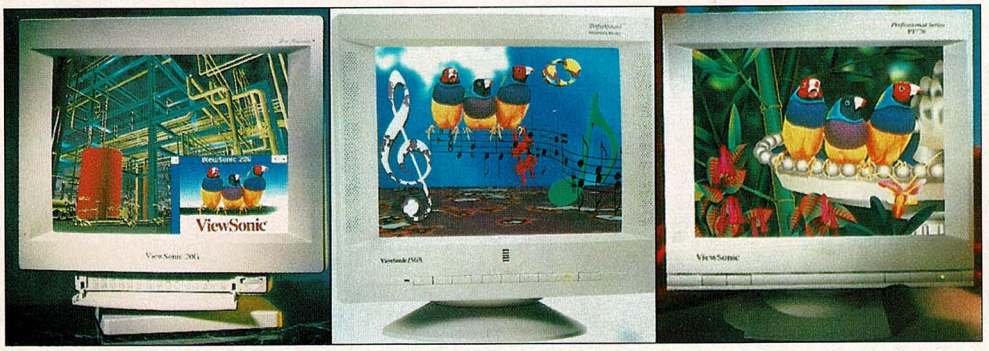
More accurate colour monitors

New display screens from American firm ViewSonic cover the range of needs from multimedia to professional graphics. The 15GA is a £445, 15-inch colour monitor, with built-in stereo speakers and connections for a microphone and headphones. A high-quality display gives you a picture of up to 1,024 by 768 dots with a refresh rate of 86Hz, which means the screen barely flickers.

The PT-770 is a £962, 17-inch screen that can display an image of up to 1,600 by 1,280 dots. A built-in menu on the screen means you can easily adjust its screen image. And the 20G offers a huge 20-inch picture of up to 1,600 by 1,280. This £1,221 monitor includes the ViewMatch feature, which enables you to adjust the colour of the screen to tie in with your printed pages, ensuring more accurate colour matching.

For more information you can contact ViewSonic's UK office on 0181 781 1856.

Monitors for all tastes and pockets in the new range from ViewSonic. Left to right: the 20G for designers, the 15GA for entertainment, and the PT 770.



Gray Matter tools

A range of CD-ROMs from Gray Matter Design gives you the resources to create your own multimedia program. They contain samples of video, sound or control designs that you can use freely once you've bought the relevant disc. *HiRez Audio*, for instance, offers CD quality audio clips; while the *Select Effects* discs have video special effects clips. Prices on the CD-ROMs start from £140.

Gray Matter has also compiled a set of books offering advice on using top authoring software. *The Macromedia Director Lingo Workshop* and *The Macromedia Director Design Guide* both take you through this top multimedia design program, while *The Official Guide to QuickTime* comes with a CD-ROM of QuickTime tools. Prices on these range from £41.13 to £49.35. For more details contact Computers Unlimited on 0181 200 8282.

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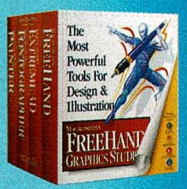

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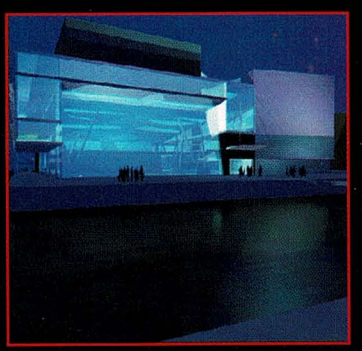

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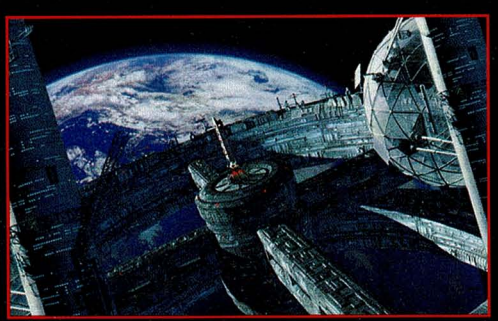

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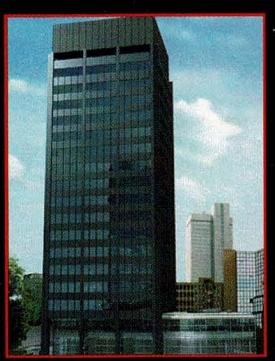

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Make your feelings known, rock the boat – *and* get a binder in return if your letter is published.

Anti-American bias?

WE LOVE YOU REALLY

As an American subscriber to MACFORMAT, I am often annoyed by the supercilious anti-American bias reflected in many of your software reviews, especially reviews of reference programs. Your reviewer Garrick Webster's chief objection to the *1996 Grolier Encyclopedia* (MACFORMAT 34), for example, seems to be what he considers its disproportionate American content.

Is it really surprising that informational software created in the United States and directed primarily for the American market would center on material of interest to this nation of 260 million people and the many others who view our country as a leader in world affairs? If CD encyclopedias were to be produced in the UK, I would not be surprised to see many entries devoted to Royal Highnesses and Right Honorables that most English speakers in the modern world understand to be peculiar British anachronisms, and to esoteric games like 'Aussie Rules footie'.

After all, when I read your otherwise excellent magazine, I understand that I will need to translate insular expressions such as 'not "sitting" an American Studies degree.'

Stanley Wertheim
New York City, via FutureNet

Other English-speaking countries do get a little sensitive about the pre-eminence of the US and do appreciate it when producers manage to 'localise' their software. This is especially true in the case of education software – it's surely preferable if children are not confused whether the last letter of the alphabet is 'zed' or 'zee', for instance. Content is a bit more problematic, but if a reference CD is for sale in the UK, it's only fair to assess whether users in the UK will find information on topics they are likely to want to look up. What do other readers think? And for the record: Garrick Webster is Canadian, and Grolier does not so much as mention Australian Rules Football.

The foreigners are coming

TRANSLATING FILE FORMATS

In your article on handling foreign file formats (MACFORMAT 34) you forgot to mention two very useful methods of opening unknown documents.

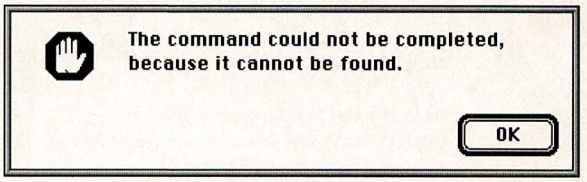
The first is to get hold of the powerful file translation filters and application *MacLink Plus* from Dataviz.

The second, which is already available to large numbers of users, is to use *Microsoft Word* to open any file as if it was ASCII. Anyone who uses *Word* (any version, from 4.0 onwards, and maybe earlier versions too) can hold down the [shift] key while selecting **Open** from the **File** menu. This will open any file (or rather, any file's data fork, I believe). You may still need to go through a lot of gibberish to get at the file's useful contents, but this process may be the only chance left with some formats.

One final point. It helps if you ask the file's originator to prepare a new 'Save as' version of their source file, rather than copying their much-worked-on file to you. Several word processing applications accumulate past deletions and re-edits within the disk file, and they don't eliminate them until the file is re-created from scratch under a new name. So asking the originator to clean up the source file this way can save you a lot of work later.

Gareth John
Nottingham, via FutureNet

Much as we hesitate to praise anything so RAM-hungry, we can confirm that Word *is superlative at opening odd file formats, even using just the standard* ***Open*** *command. Doing a 'Save As' is an excellent tip – especially with* Word*, ironically, which creates very 'messy' files, particularly if you 'Fast Save'. The 'Save As' trick also works if you use the* same *file name – the new, 'clean' version should over-write the old file completely.* MacLink Plus *costs £116, or £152 for the 'Pro' version, which supports more formats. For more details contact Principal Distribution, 01706 832000.*



Silly Things Your Mac Says, number 427, from Vincent Quinn in Ireland, via FutureNet. Maybe 'it cannot be found' is some sort of catch-all code phrase for 'your guess is as good as mine'?

A HOME OF THEIR OWN

Foreign files, American software... there even seem to be a lot of letters from Scotland this month. But they're all welcome here, and you can give your copies of MACFORMAT a home too with an exclusive MACFORMAT binder. Every letter and postcard published on these pages wins one, or you can turn to page 115 and order one. Much more stylish than a cardboard box – and cosier too!

Continued on next page

THE BITSTREAM TYPEFACE LIBRARY – A CORRECTION

Unfortunately, the *Really Useful DTP Book* supplied with MACFORMAT 35 has proved to be not at all useful to Bitstream.

On page 16 you state: 'One of the cheapest ways of expanding your font collection is to try the Bitstream font library. These fonts are only good for output up to 300dpi – ie for laser printer use. But if you use a bureau which has the high-res version in its library, they can provide you with imagesetting-quality output.'

This description is totally inaccurate and severely denigrates the Bitstream product and implies that the current Bitstream Typeface Library is a low-resolution product.

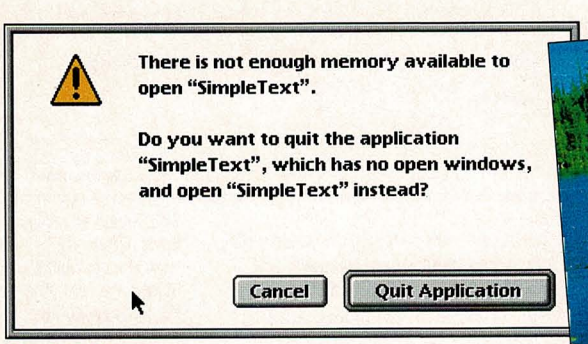
We have not offered low-resolution 'Designer Library' fonts for sale for over three years. The current Bitstream Typeface Library, for sale at £895 [excluding VAT] on CD and comprising over 1,100 fonts, is resolution independent and is by far the best selling typeface library in the UK. The fonts are high quality, Type 1 outlines for use on any device from a low resolution computer monitor to a high resolution (4,000dpi) imagesetter.

Terry Byrne
Mainstream Software Solutions Ltd
Cheltenham, Glos.

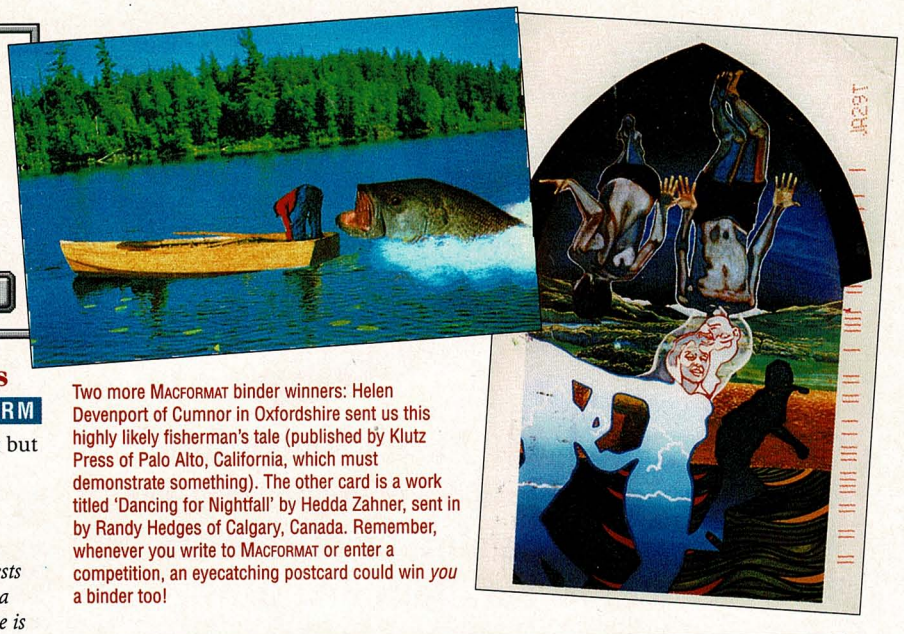
We are happy to set the record straight and apologise for the confusion. The writer of the chapter concerned is a veteran DTP professional who must have been thinking back to his younger days.

The current Bitstream Typeface Library is a collection of fully scalable PostScript Type 1 fonts, meaning that they are resolution-independent and will print out at the best quality your printer is capable of.

Mainstream Software Solutions is offering the Bitstream TypeShop CD-ROM (1,085 fonts) ***plus*** *the Bitstream TypeShop Pro CD (49 new fonts and 47 extended character sets)* ***and*** *a free gift (a mountain bike, Philips VCR, portable TV or mini hi-fi system!), all for the RRP of the first CD-ROM, £1,051.62 (£895 ex VAT). You can phone Mainstream Software Solutions on 01242 227377 or fax 01242 251319.*


There is not enough memory available to open "SimpleText".
Do you want to quit the application "SimpleText", which has no open windows, and open "SimpleText" instead?
Cancel
Quit Application

More Silly Things Your Mac Says, this time from Adam Tinworth of London SE13 via snail mail. Personally, I think the problem must be something to do with the shareware *Aaron*, or whatever Adam's using to give his Mac that 'I've already got System 8' look... Has your Mac given you a silly message? Grab it by hitting **[command] [shift] 3** and send it in to us!



Two more MACFORMAT binder winners: Helen Devenport of Cumnor in Oxfordshire sent us this highly likely fisherman's tale (published by Klutz Press of Palo Alto, California, which must demonstrate something). The other card is a work titled 'Dancing for Nightfall' by Hedda Zahner, sent in by Randy Hedges of Calgary, Canada. Remember, whenever you write to MACFORMAT or enter a competition, an eyecatching postcard could win *you* a binder too!

Speaking of translations

'FOREIGN' IS A RELATIVE TERM

This is a grat mag you are macking but he piece is bad

Michael Guest
Edinburgh, via FutureNet

Lindsay Bruce, our resident Scot, suggests that this should possibly read: 'This is a great mag you are making but the price is bad.' Or perhaps: 'So how does this e-mail thing work then?' Maybe: 'What happens if I push this button?' Even: 'You can't possibly get a good education at a comprehensive school, you need to go private these days.' Or just: 'Isn't it a shame how on-line text editors don't seem to have spelling-checkers?'

The price of chips

GOOD QUESTIONS OF OUR TIME

Can you explain to me and to Mac users everywhere *why*, when prices seem to drop dramatically on all other computer products as demand increases; *why*, as it must be one of the most sought-after additions to any Mac; WHY IS MEMORY SO B*@@!Y EXPENSIVE?? It seems to me that if computer manufacturers wish to boost their sales, they could do worse than examine the one area that every user at some time or other tears their hair out over – lack of memory!

Either bring the price of it down or provide more in the base machines – especially machines sold with System 7.5 onwards.

Jon Dalrymple
Edinburgh

Er, supply problems... fire in the circuit board factory... rising price of silicon... Oh, all right then. It's a fair cop. **MF**

System 8 wish list

What would you like to see in the next version of the Mac OS (codenamed Copland, or System 8), when it appears?

When you click on **About this Macintosh...** to find where all your memory is being used because the 15th application won't open, you should be able to choose the application to close directly from there, without going to the Applications menu at the top right hand corner.

Plus, would it not be logical and useful to have a command under 'File' to enable you to go straight to the original of an alias without actually opening it? At the moment, the route is via **Get Info** and then **Find Original** – two steps with no shortcut available for the second.

Malcolm Philcox
via FutureNet

I'm one of those sad people whose main priority is how pretty the Desktop looks. Let's face it, the range of Desktops in System 7.5 is not really amazing... Instead of Desktop Backgrounds I think we should be allowed a large choice of the entire Desktop layout. For instance, I would like a Desktop which is like a jigsaw, sort of, which each *three dimensional* piece taking you somewhere different – so one piece could be labelled Mac OS and would contain the System Folder and have a large Happy Mac on it, another might have a massive eWorld picture on it and contain whatever modem software you choose, and so on.

Michael Amherst
via FutureNet

I would like to see the [alt]+[tab] method of switching between open applications built into the System – I find it very useful. After all, Windows has consistently copied the Mac System software, so why not 'tit-for-tat'?

Also I think the built-in ability to set custom colours for menus, windows, and so on, is long overdue. I believe Copland will have this, but I have only heard about fixed 'personalities' – so will they be fully customisable? I hope so.

And those Function keys – I want to be able to use them! How about the ability to set them up as extra 'command key' sequences to activate menu items?

Are you receiving, Apple?

Tim Mowlem
Sittingbourne, Kent,
via FutureNet

HOW TO GET IN TOUCH WITH MACFORMAT

■ Our address for letters is on the previous page – the shorter your letter, the better its chances of being printed. Longer letters may be published in our regular 'Talking Point' section. If you'd like a letter included in 'Readers' Corner' on our CD-ROM, make sure it contains no defamation or obscenity, then send it in as a *TeachText* document on a disk marked 'MACFORMAT Readers' Corner'. Include your name and address, and note that we can't return your disk.

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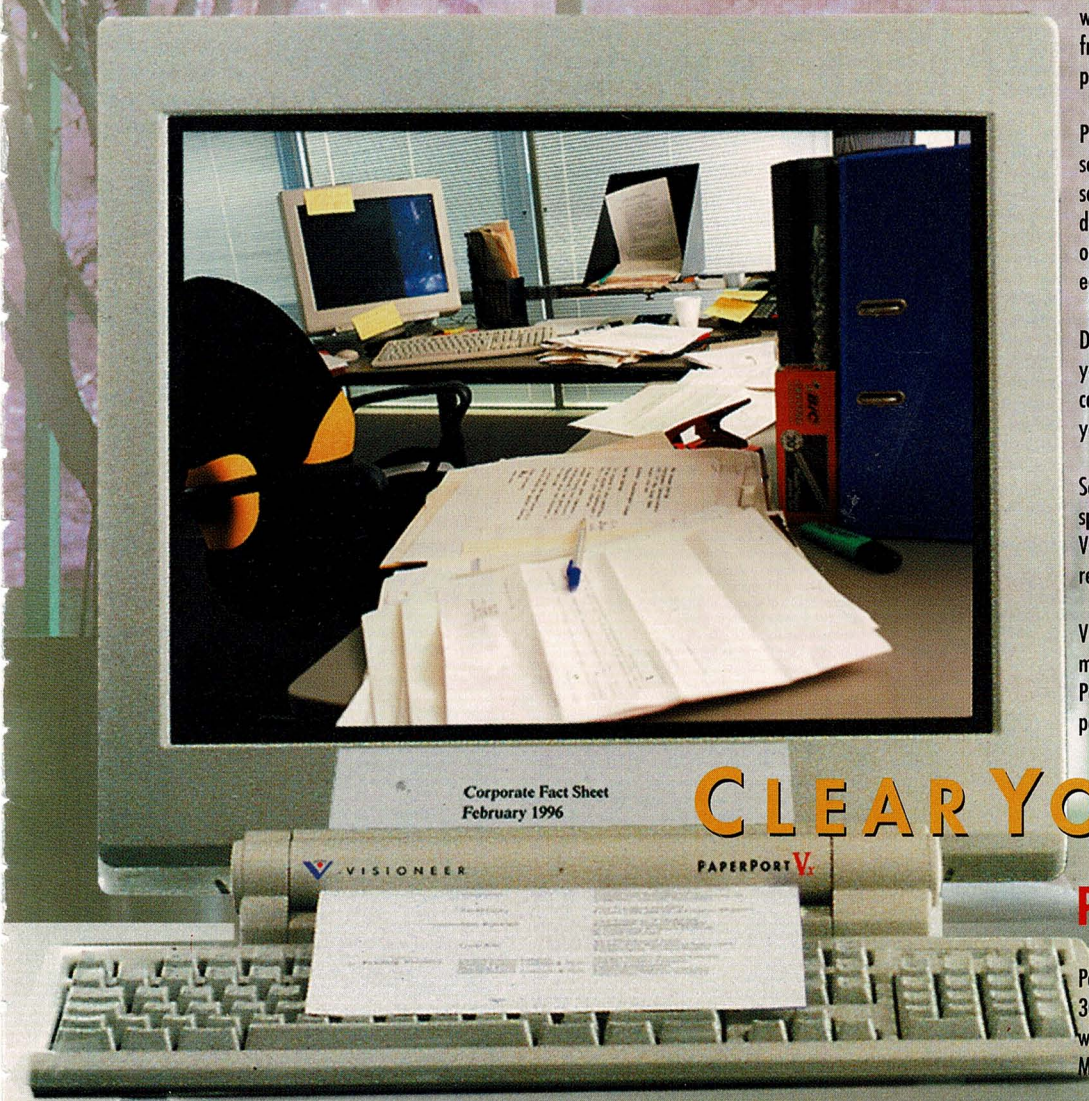

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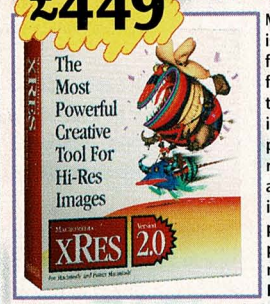

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-MEMORY-

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POWERMAC

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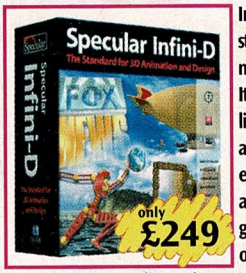

Infini-D sets the standard for 3D animation and design. It combines modelling, rendering and animation into one easy to learn package and also integrates perfectly with other well known graphic or multimedia products. Normal cost £525.00

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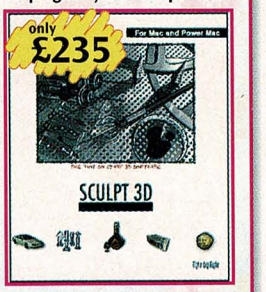
Sculpt 3D v4.1 is the 3D program you can depend on! Speed to winning photorealistic imagery. Sculpt's easy to learn, industry leading ray trace rendering engine produces picture perfect images regardless of complexity. Normally £995.00



GRAPHICS

PHSPB	Adobe Collection (Photoshop,Illustrator, Dimensions)	£499.00
CLDW	ClarisDraw (powerful, easy to use draw package)	£89.00
ADIM	Dimensions (Adobe's 3D extension for Illustrator)	£110.00
PSER	Fractal Design Poser (create human figures)	£119.00
FRND	Freehand 5.5 (professional PostScript drawing & text)	£315.00
INFD	Infini-D 3.1 (leading 3D modelling & rendering tool)	£525.00
ILST	Illustrator 6.0 (pro PostScript drawing, text & layout)	£299.00
KPTK	Kai's Power Tools 3.0 (amazing filters for Photoshop)	£95.00
KPTV	KPT Vector Effects (Illustrator/FreeHand FX Plug-Ins)	£95.00
KPTC	KPT Convolver (adds power and ease to Photoshop)	£95.00
KPTB	KPT Bryce (3D Skies and landscapes)	£95.00
LIVP	Live Picture (real-time photographic retouching)	£645.00
MCAD	MiniCad 6.0 (native professional 3D design & analysis)	£495.00
RYDS	Ray Dream Studio (3D design, modelling, animation)	£279.00
PHSP	PhotoShop 3.0 (special offer price - while stocks last!)	£325.00
PNTR	Painter 4.0 (the premiere painting program)	£299.00
STRV	StrataVision 3D (modelling, rendering and animation)	£159.00

DESKTOP PUBLISHING

ACRA	Adobe Acrobat 2.1 (paperless publishing revolution)	from £110.00
ATM	ATM 3.8 (smooths screen and print fonts)	£39.00
CAIP	Click Art (2500 clip art images)	£39.00
CBxx	Corel Images (25 CDs of clip art quality photographs)	£110.00
CBGB	Corel Gallery II (15000 clip art images)	£49.00
FTCH	Fetch (superb image database system)	£85.00
FNTG	Fontographer 4.1 (best professional font creator)	£299.00
PMKR	PageMaker 6.0 (power and ease of use 68k /PowerMac)	£379.00
QKXP	Quark Xpress 3.32 (the professional's choice)	£599.00
QKXZ	Quark Xpress 3.32 (Power Mac Native version)	£665.00
QK	Quark Xtensions (we carry a wide range)	please call
TYSL	TypeStyler (manipulates PostScript fonts)	£99.00

PRINTERS

ECS2	Epson Stylus Colour II (brilliant quality colour inkjet)	£315.00
ECSH	Epson Stylus XL A3 (A3 colour inkjet, non PostScript)	£895.00
HP34	HP DeskJet 340 (portable colour inkjet)	£225.00
HP60	HP DeskWriter 600 (superb new inkjet, Appletalk)	£219.00
HP66	HP DeskWriter 660C (colour and mono in one)	£289.00
HP85	HP DeskJet 850c(higher speed, 600dpi mono, 300 clr)	£375.00
LBWX	LabelWriter XL (mini thermal printer produces labels)	£159.00
MLP6	Texas MicroLaser Pro (600dpi A4 PostScript)	£775.00
PWPR	PowerPrint (driver and cable for non-Apple printers)	£79.00

MONITORS

M17E	Apple 17" 1705 Monitor	£535.00
M17V	Apple 17" 1710 AV Monitor	£745.00
RDI20	Radius IntelliColour 20" Monitor	£1399.00
SN15	Sony 15" Trinitron Monitor CPD 15SF1	£359.00

SCANNING

AFSA	Agfa StudioScan IIsi (2400dpi, fast, the best)	£635.00
SME3	Microtek ScanMaker E3 (600dpi, with OmniPage)	£279.00
STAY	Nikon AX1200 (fast, 1200dpi res A4 desktop scanner)	£849.00
UVSA	Umax Vista S6 (with Photoshop LE)	£315.00
OMPP	OmniPage Pro 6.0 (OCR directly into applications)	£369.00
PPRT	PaperPort (mono desktop OCR and scanning)	£235.00
PPRV	PaperPort VX (greyscale desktop OCR and scanning)	£279.00

WORD PROCESSING

WRD5	Microsoft Word 6.0 (market leading WP heavyweight)	£265.00
NSWR	Nisus Writer 4.0 (multiple languages capability)	£99.00
WDP3	WordPerfect 3.1 (special offer price, ends soon)	£65.00
WRNB	Write Now 4.0 (fast, includes Correct Grammar)	£45.00

DATABASES

4DFR	4D First (low cost relational database)	£95.00
ACTA	ACT! (excellent contact management)	£149.00
CORG	Claris Organiser (full featured new database)	£45.00
EXPR	Expresso (actual desktop diary for your Mac)	£20.00
FLMK	FileMaker Pro 2.1 (best flat file, everyone needs it)	£95.00
FLMR	FileMaker Pro 3.0 (now with relational features)	£165.00
FOXB	FoxPro 2.6 (fast DB with great interface, reads dBase)	£85.00
INFG	InfoGenie (info organiser, supercedes QuickDex)	£45.00
NOWB	Now Up-To-Date 3.5 & Now Contact 3.5 Bundle	£55.00
OMNW	Omnis WorkGroup Edition (10 user client/server)	£475.00
CKBD	Three by Five (5 mouse rated computer "corkboard")	£65.00
TPBP	TouchBase/DateBook Bundle (contact & calendar)	£35.00

BUSINESS

GENERAL

ASTD	Astound 2.0 (fabulous new version)	£185.00
CLWR	ClarisWorks 4.0 (market leader of the integrated world)	£95.00
EXCL	Microsoft Excel 5.0 (market leader, great features)	£265.00
MSOF	Microsoft Office 4.2 (Word, Excel, PowerPoint)	£375.00
WRKS	Microsoft Works 4.0 (WP, DB, Comms, Draw, SSheet)	£69.00
PERS	Persuasion 3.0 (high end presentations with outliner)	£255.00
PWPT	PowerPoint 4.0 (powerful, intuitive, easy inteface)	£265.00
STKW	StockWatcher (analyze stocks, commodities etc.)	£145.00

ACCOUNTING

MCMY	MacMoney 4 UK (home accounts/budgeting package)	£65.00
MYOB	MYOB 5.0 (fully integrated single user business accounts)	£145.00
RITZ	Ritz (powerful and comprehensive for smaller business)	£319.00

COMMUNICATIONS

MR34	Motorola 3400 (MacUser Best Buy 28.8 baud)	£165.00
SPR3	Sportster FaxModem (28,800 baud, BABT approved)	£189.00
SPEA	SupraExpress FaxModem (quality, low cost 14.4 baud)	£85.00
SPEB	SupraExpress FaxModem (quality, low cost 28.8 baud)	£145.00
SPRA	Supra FaxModem (top quality, Grp III 28.8 baud)	£185.00
TLPT	TelePort Platinum (28.8 modem from Global Village)	£240.00

NETWORKING

ANET	LocalTalk (AppleTalk) connector kits	£14.00
FTNP	PhoneNet connector kits	£12.00
FEHA	EtherLan Hub 9 (9 port ethernet 10baseT Hub)	£125.00
FRAD	Farallon AirDock (Infra Red LocalTalk connector)	£69.00
QKML	QuickMail 3.5 10 User (powerful flexible E-Mail)	£365.00
ASPA	AsantePrint (Ethernet to AppleTalk printer router)	£249.00
ETWx	EtherWave (daisychain Ethernet from Farallon)	£165.00
	Ethernet Cards & Tranceivers (Asante, Shiva, Focus)	from £29.00

MULTIMEDIA

MRPHB	Morph 2.5 (morph from one QuickTime movie to another)	£79.00
MDRT	MacroMedia Director 4.0 (key multimedia tool)	£795.00
PRMR	Premiere 4.2 (Adobe's brilliant QuickTime editor)	£399.00
VIDD	Video Director 2.0 (edit your home videotapes)	£89.00

PC COMPATIBILITY

ACPC	Access PC 3.0 (read/write PC floppys from your Mac)	£75.00
DSMT	DOS Mounter Plus (read/write PC floppys from your Mac)	£55.00
MLPT	MacLink Pro (best Mac/PC link with100's translators)	£110.00
PCEX	PC Exchange (Apple's own brand software)	£35.00
SOFT	Soft PC and Soft Windows (DOS emulation on a Mac)	from £79.00

INTERNET

QXOF	BeyondPress (Web Page creator plug in for Xpress)	£485.00
CLEM	Emailer (great mail program, supports many services)	£55.00
NTSCB	NetScape Navigator (best browser, includes manuals)	£55.00
NWHP	NewsHopper (easiest way to read newsgroups)	£32.00
PGML	PageMill (the ONLY way to create web pages)	£75.00
INET	Registration Kit (Internet dial up, email,Web, FTP)	£25.00
STCH	Snatcher (easy to use Internet file transfer software)	£35.00
STML	SiteMill (eases maintenence of Web Sites)	£285.00
SFWT	SurfWatch(block access to porn on the Web)	£39.00
BK5010	Internet Starter Kit (the best book)	£27.50
AW#1W	Internet Web Server (Power Mac Web server)	from £2295.00

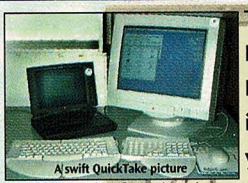
POWERBOOK

CCPx	Carry Case (Apple or third party)	from £19.00
CPPC	Car Power Adaptor (plug in to the car lighter socket)	£49.00
PCNA	Ethernet Card (Farallon 10BaseT PCMCIA card)	£165.00
FEVC	MV16 (16 bit colour/10BaseT Ethernet for 5300/190s)	£329.00
GPCA	PowerPort Platinum (PCMCIA 28.8 fax modem)	£449.00
TPCM	TDK Modem (PCMCIA 28.8 fax modem)	£225.00

ACCESSORIES

CBxx	Cables (we have a wide range - please ring)	call
TNxx	Toners/Ink Cartridges (for laser & inkjet printers)	call
KBCE	Extended Keyboard (15 function keys, numeric pad)	£49.00
QCKC	QuickCam (mono video camera for QuickTime)	£79.00
AGMJ	JetStick (joystick for the control you've always wanted)	£45.00
SESY	Security Systems (is your Mac vulnerable to theft?)	from £29.00
TMADD	Thinking Mouse (4 button with software)	£65.00
TMADB	Turbo Mouse (top selling trackball)	£75.00
WCU6	Wacom ArtPad II A6 (handy stylus and tablet)	£135.00
WCU5	Wacom UltraPad A5 (stylus and tablet)	£279.00
WCU4	Wacom UltraPad A4 (professional stylus and tablet)	£389.00
VR256	256K VRAM Chips (adds more colours)	£19.00

FOCUS



This new card offers both 10BaseT Ethernet and 16 bit video for the PowerBook 150 and 5300 family in a single compact product. Now you can drive an external monitor up to 17 inches in size at true 16 bit (thousands of colours) resolution. In addition it will give you 8 bit resolution (256 colours) on 20 inch monitors turning your PowerBook into a desktop publishing workhorse. By using this card, you can save money and save valuable PCMCIA slots.

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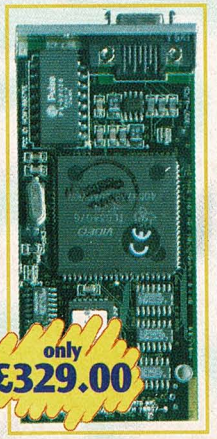

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CLARIS

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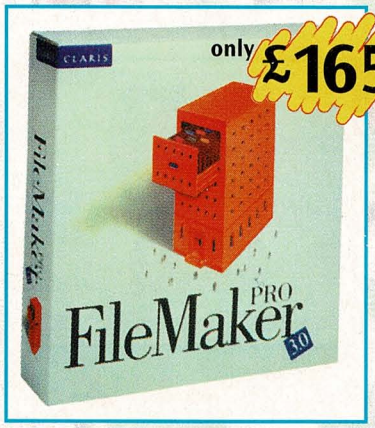

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D2230 **d2 230Mb Optical Drive** (inc cart) . . £439.00
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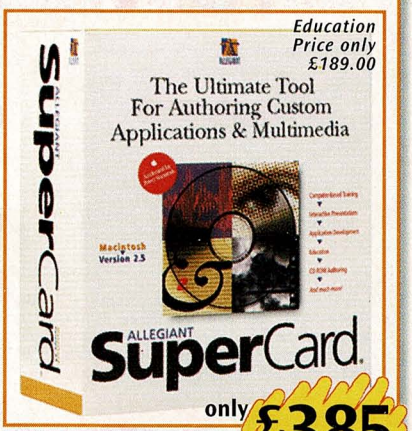
CDMO **Micronet 4x CD ROM Drive** £199.00
R45C **44Mb Syquest Cartridge** £32.00
R80C **88Mb Syquest Cartridge** £35.00
R20C **200Mb Syquest Cartridge** £55.00
R12C **128Mb Optical Cartridge** £19.00
R23C **230Mb Optical Cartridge** £25.00
ZIPA **Iomega ZIP Drive** (inc cart) £165.00
EZ13 **Syquest EZ135 Drive** (inc cart) £175.00
JAZA **Jaz 1G Drive** (inc cart) £459.00

ALLEGIANT

SuperCard 2.5



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RUFF **Ruff's Bone** (adventures with Ruff the dog) £29.00
REDCD **Red Shift** (superb astronomy program) £39.00
STTM **Star Trek Interactive Tech Manual** (tour de Enterprise) . . . £29.00
HARECD **Tortoise and the Hare** (the epic race) £29.00
UHBCD **Ultimate Human Body** (Dorling Kindersly's one) £39.00
WWCD **Widget Workshop** (fun in a mad scientist's laboratory) . . . £25.00

ENTERTAINMENT

BEST-SELLING GAMES ON CD

1) DOM2 **Doom II** (you may have heard of this game!) . . £35.00
2) MRTHCD **Marathon II** (can you resist?) £45.00
3) MYST **MYST** (magical mystery adventure) £35.00
4) PRPCD **Prince of Persia I & II** (two of the best games ever) . . £19.00
5) DKFCD **Dark Forces** (brilliant game based on Star Wars) £35.00
6) PGA3 **PGA Golf III** (more challenging games) £35.00
7) SIMCC **Sim City 2000 Collection** (with extra goodies) £39.00
8) MRTCD **Marathon** (the best selling game even better on CD) . £39.00
9) LEMC **Lemmings Bundle** £22.00
10) ALRC **Al Unser** (arcade car racing) £22.00
11) PLGDCD **Links Pro Golf** (features network play) £22.00
12) DSCT **Descent** (cross between Doom and Rebel Assault!) . . . £29.00

BEST-SELLING GAMES ON FLOPPY DISK

1) SIMC2 **Sim City 2000** (design and run your own city) £29.00
2) A10A **A10 Attack** (the best flight sim around) £39.00
3) FLSM **Microsoft Flight Simulator** (realistic, accurate) £35.00
4) CHCH **Chess Champion** (best Chess game) £25.00
5) ERIC **Eric's Ultimate Solitaire** (a dozen patience games) . . . £35.00
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8) ITG10 **10 Intelligent Strategy Games** (backgammon...) £29.00
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10) F18H **F/A18 Hornet** (from the creators of Hellcats) £49.00
11) FSHB **FlashBack** (science Fiction adventure) £25.00
12) SHNM **Shanghai: Great Moments** (more Shanghai) £29.00

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BRTM **Buried in Time** (sequel to Journeyman Project) £29.00
BRNCD **Burn Cycle** (futuristic interactive challenge) £29.00
FRKCD **Frankenstein** (interactive story, you play the monster) . . . £35.00
FTHCD **Full Throttle** (motorcycle madness) £32.00
IFDCD **In the First Degree** (play a murder prosecutor) £35.00
SIMI **Sim Isle** (control your own island) £29.00

RBAS **Rebel Assault II** (sequel to one of the best games) £35.00
YKJCD **You Don't Know Jack** (fantastic quiz show) £27.00

NEW GAMES ON FLOPPY DISK

PLPR **Links Pro Extra Course** (Mauna Kea) £20.00
ALRD **Al Unser** (arcade car racing) £22.00
ISHD **Ishido** (Chinese strategy game) £22.00
TRZL **Triazzle** (brain teaser from Berkeley Systems) £19.00

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BEST-SELLING BOOKS

1) BK4075 **Mac Bible 5th Edition** £29.95
2) BK5010 **Internet Starter Kit Mac** £27.50
3) BK6035 **Quark Xpress Book 4th Ed.** £29.99
4) BK2180 **Macworld Photoshop V3.0 Bible** £38.99
5) BK4055 **Little Mac Book 3rd Ed.** £14.99
6) BK2015 **Photoshop Wow Book** £31.61
7) BK2215 **Illustrator 5.5 Book** £29.95
8) BK1185 **Resedit 2 Complete** £28.95

TRAINING

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for Quark, Photoshop, Illustrator, FreeHand, PageMaker . . . .each £75.00
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PROGRAMMING

HYPC **HyperCard 2.3** (new version, more power) £95.00
CDWB **Metrowerks Code Warrior Bronze v8** (680x0 compiler) £95.00
CDWG **Metrowerks Code Warrior Gold v8** (PowerMac compiler) . . . £265.00
ZCP **Symantec C++** (best object oriented tool) . . . . . .from £75.00
THKC **Think C 6.0** (the leading Mac app development tool) £185.00
THKP **Think Pascal 4.0** (excellent developer level compiler) . . . £165.00
FTBS **FutureBasic II** (the best Basic for Mac, includes PG Pro) . . £179.00

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EASE **At Ease 3.0** (secure Finder replacement) £35.00
INVU **Conflict Catcher 3.0** (INIT manager and more) £55.00
NDBP **DiskDoubler Pro** (DiskDoubler,AutoDoubler,CopyDoubler) .£60.00
HDTK **Hard Disk Toolkit** (the best formatter and checker) £125.00
MCTA **MacTools Pro 4.0** (disk safety and protection utility) £79.00
NUM **Norton Utilities 3.2** (best selling utilities package) £79.00
NOWU **Now Utilities 5.0** (suite of essential utilities) . . . . . .special
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RASP **RamDoubler & SpeedDoubler Bundle** £69.00
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SUIT **Suitcase 2.14** (manage your font menus) £49.00

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ARTT **Arthur's Teacher Trouble** (interactive story book) £29.00
ARTB **Arthur's Birthday** (more Arthur) £29.00
BKSCD **Book Shelf** (superb CD ROM for everyday reference needs) . £39.00
CRWRCD **Creative Writer** (DTP for kids) £25.00
CINI **Cinemania 95** (19000 movie reviews and more) £35.00
CIRCD **Circus** (learn while playing with clowns and animals) £29.00
DINO **Dinosaurs** (the "must have" CD of the year) £25.00

VR512 **512K VRAM Chips** (adds more colours) £29.00
VR9A **1Mb VRAM DIMM** (for 7200, 7500, 8500) £69.00
VR9B **2Mb VRAM DIMM** (for 7200, 7500, 8500) £195.00

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UP TO 12 YEARS

AMAN **Amazing Animation** (cool animation for kids) £45.00
KDMH **KidsMath** (takes kids from counting to arithmetic) £29.00
KDPX **KidPix II** (wonderful paint program with sound effects) . . £29.00
NMBM **NumberMaze** (award winning arithmetic tutor) £35.00
RDMZ **ReadingMaze** (letter recognition to sentences) £35.00
SPLX **Spelunx** (brilliant game-like learning environment) £29.00

FROM 10 YEARS UP

DFMZ **Decimals & Fractions Maze** (helps older kids) £35.00
TYEN **Typing Instructor** (good training from basics to touch) . . . £25.00
WIWD **Where in World is Carmen DeLuxe** (geography based) . . . £29.00

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Successor to the best selling scanner on the market, Microtek's ScanMaker E3 offers true 300 by 600 dpi 24 bit colour scanning at a ridiculously low price. This single pass A4 unit will also interpolate up to a whopping 1200 by 1200 dpi for ultra high resolution work. Included completely free is OmniPage Direct 2.0 OCR which will let you scan a page of text and turn it into a text file which you can open up in a word processor. If you don't already own a copy of Photoshop you can choose to buy the full version for an additional £149.00 or the cut down Photoshop LE version, which offers no colour separation abilities, for only £45.00 – **version 3.0** in both cases! You can also add a transparency unit for £349.00. It's the perfect solution for home and small business Desktop Publishing.

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PowerPC PowerPC PowerPC

POWER MAC 7200/75 8/500

Apple's newest Mac is based around a 75Mhz PowerPC 601 chip and has three PCI slots. Its 1Mb of standard VRAM will support 16 bit colour on a 14" monitor and expanding to 4Mb offers 16 bit colour on a 20" monitor.

from only £945

PowerPC PowerPC PowerPC

5200 PLUS II 8/800/CD/M

Based around the brand new Power PC 603 chip running at 75MHz, the 5200 combines the CPU, a 15" multiscan monitor and 14.4 modem in one housing. It has a built-in quad speed CD ROM drive and the (optional) TV and video capabilities of the Performa 630. With its 256k cache memory, it is equivalent in speed to a Power Mac 6100 for a lot less. Includes ClarisWorks and optional software bundle.

from £1375

PowerPC PowerPC PowerPC

POWER MAC 9500/132 16/2Gb/CD

POWER MAC 9500/132 16/2Gb/CD/Video

PERFORMA BUNDLES

630R **Performa 630 12/500/CD/DOS** (includes keyboard and mouse but **no** monitor). £999.00

630H **Performa 630 12/500/CD/DOS & 15" Multiple Scan Display** £1245.00

5200D **Performa 5200 Plus II 8/800/CD/Modem** & software. £1375.00

5200E **Performa 5200 Plus II 8/800/CD/TV/Modem** & software. £1435.00

5300A **Performa 5300 Plus II 16/1200/CD/TV MPEG/Modem** & software £2045.00

6200H **Performa 6200 Plus II 8/800/CD/Modem & 15" Multiple Scan Display** & software £1325.00

6200J **Performa 6200 Plus II 8/500/CD/TV & 15" Multiple Scan Display** & software £1245.00

all Performas include a genuine AppleDesign Extended Keyboard and Mouse. "& software" refers to: PC Exchange, ClarisWorks, MacGallery, Mavis Beacon, Millie's Math House, Spin Doctor, SuperMaze Wars, Thinkin' Things 2, Asterix Language, Concertware, The Way Things Work, 3D Atlas, Grolier's Encyclopedia, Making Music, Myst, Rednex, Rock, Rap, Roll, Snoopy CD, Daedelus Encounter - FREE!

POWER MACs

5200F Power Mac 5200 8/800/CD £1149.00
(while stocks last only)

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7200B Power Mac 7200/90 8/500/CD £1299.00
7200C Power Mac 7200/90 16/1Gb/CD £1725.00

7500A Power Mac 7500/100 8/500/CD £1775.00
7500B Power Mac 7500/100 16/1Gb/CD £2195.00

8500A Power Mac 8500/120 16/2Gb/CD £3345.00

PM9B Power Mac 9500/132 16/2Gb/CD £3375.00
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AW81A AWS 8150 16/2000/CD/DAT & AppleShare 4.1 . . . . . £5295.00
AW91A AWS 9150 24/4000/CD/DAT & AppleShare 4.1 . . . . . £7395.00
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P19B PowerBook 190 8/500 . . . . . £1220.00
P19C PowerBook 190cs 4/500 . . . . . £1455.00
P19D PowerBook 190cs 8/500 . . . . . £1585.00

P53A PowerBook 5300 8/500 . . . . . £1495.00
with 28.8 TDK FaxModem £1675.00
P53B PowerBook 5300cs 8/500 . . . . . £1895.00
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PowerPC PowerPC PowerPC

POWER MAC 7500/100 8/500/CD

from only £1775 CPU only

PowerPC PowerPC PowerPC

6200 PLUS II 8/500/CD

Also based around the brand new Power PC 603 chip running at 75MHz, the 6200 is housed in the same case as the Performa 630. It has a built-in quad speed CD ROM drive and has the optional TV and video capabilities of the Performa 630 and comes with a 15" MultiScan Monitor.

from £1245

PowerPC PowerPC PowerPC

POWER MAC 8500/120 16/2Gb/CD

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M20D	20" Colour	£1275.00

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CD6	Apple CD 600e plus external	£225.00
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NBPC	NuBUS Adaptor 6100	£52.00
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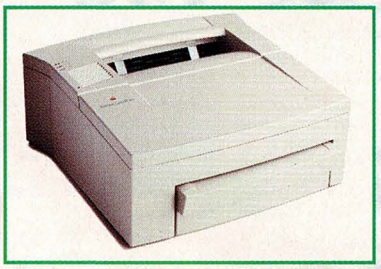
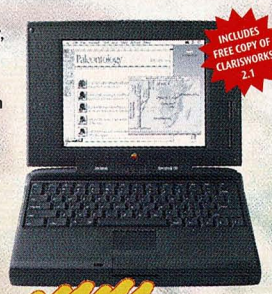


Great value for money at only £450. You get 300 dpi grey scale output and 4 pages per minute from this quiet and compact unit. Includes 512k of RAM and 39 TrueType fonts free.

only £450

POWERBOOK 190

With its 66Mhz 68040 processor, the PowerBook 190 4/500 is really fast. It sports a 9.5 inch backlit passive matrix 16 grey level screen, a slot for PCMCIA cards and a trackpad. It is also available with a dual scan colour screen.



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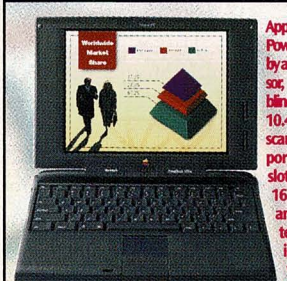
POWERBOOK 5300cs



Apple's latest, hot PowerBooks are powered by a 603e PowerPC processor, the cs running at a blinding 100Mhz. It has a 10.4 inch backdit dual scan colour screen supporting 256 colours, a slot for PCMCIA cards, 16 bit stereo sound and built in infra red technology supporting LocalTalk - so you can have wireless data transfer between PowerBooks and infra red equiped Macs.

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with free TDK modem until 30/3/96

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only £179

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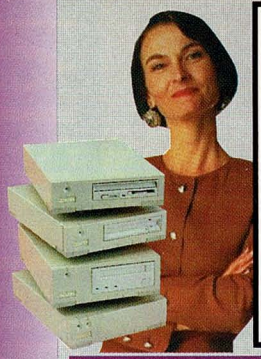

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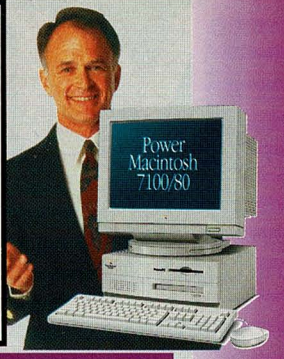

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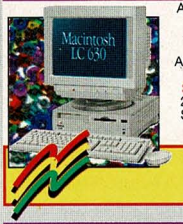
HP 320 Mono 600x300dpi	£179
HP 660 Colour 600x300dpi	£265
HP LaserJet 5MP 600dpi	£785
HP LaserJet 4MV A3 600dpi	£2139
Lexmark 4079 Plus A3 Colour	£2399
TI MicroWriter PS23	£Call
TI MicroWriter 600	£Call

Performa 630+ 8/500/CD



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8Mb Ram.
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23 Titles including: -
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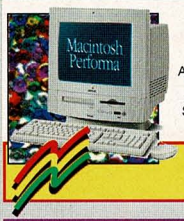

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15" FST Display.
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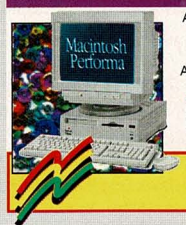

Apple 15" Multiscan..
8Mb Ram.
500Mb HardDrive.
CD-ROM 600i.
AppleDesign K/Board.
Mouse.
SoftWare Bundle.....
23 Titles including: -
System7.5. At Ease.
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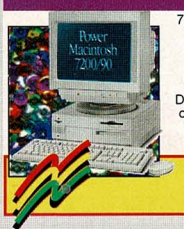
PowerMac 7200/75 8/500

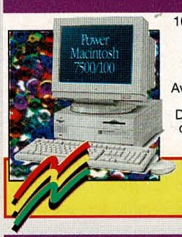


75MHz PowerPC 601.
8Mb RAM.
1 Mb VRAM.
500Mb HardDrive..

CPU only price.
Don't forget to add the cost of a Monitor and Keyboard.

£999

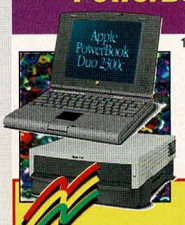
PowerMac 7500/100 8/500/CD



100MHz PowerPC 601.
8Mb RAM.
2 Mb VRAM.
500Mb HardDrive.
CD-ROM 600i
Avid Videoshop S/Ware.
CPU only price.
Don't forget to add the cost of a Monitor and Keyboard.

£1675

PowerBook 2300c Duo Dock



100MHz PowerPC 603e
8Mb RAM.
700Mb HardDrive.
9.5" Colour Matrix.
Mobility Bundle.
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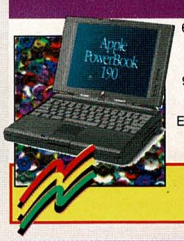

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500Mb HardDrive.
512k VRAM.
9.5" Greyscale Matrix.
Software Bundle: -
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Entertainment Software,
Route 66 and
ClarisWorks.

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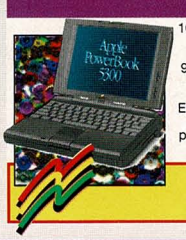
PowerBook 5300 8/500



100MHz PowerPC 603e
8Mb RAM.
500Mb HardDrive.
9.5" Greyscale Display.
Software Bundle: -
Mobility Bundle.
Entertainment Software,
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protection software and
Floppy Disk Maker.

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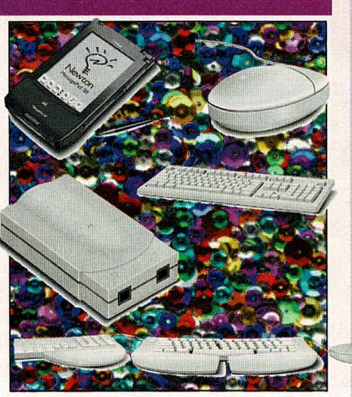

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Passive is out, active is in! It's time to roll up your sleeves and make your own multimedia software – and with today's tools and your Mac, it's never been so easy. MACFORMAT shows you how.

Multimedia is everywhere – from education to entertainment, from reference works to digital worlds.

But multimedia isn't just the stuff you buy on CD-ROMs – you can create your own, using almost any Mac. Multimedia authoring doesn't have to be about programming or learning complicated procedures – it's simply a matter of assembling components, and today's authoring software makes it as easy as cut-and-paste. After all, if you can do it with text in a word processor, or pictures in your art package, why not juggle elements like sounds, graphics and QuickTime video? You can even add the crucial element of controllability and create a truly interactive presentation.

The software to do it has been around for years – 1987's *HyperCard* was the first of what became authoring programs. But today the professional packages are more powerful and sophisticated, and the entry-level programs easier to use than ever before.

This issue, we look at how you can use multimedia in business, at school and at home, then show you the best tools and how to use them. Then you can try it yourself using our CD-ROM and Cover Disk programs, with fully-working software including *ProView* and the brand-new *Apple Media Tool 2.0!* The adventure begins overleaf...

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ROLL 'EM!

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DIY SOFTWARE

You no longer have to buy multimedia off the shelf. Richard Hill shows you how people are creating their own software, and using it to reach a new audience.

Your eyes flicker back and forth across the screen, your hand circling in uncertain patterns. You pause as you weigh up the options, until finally the decision is made. You move the mouse to select your chosen course and your Mac murmurs into action.

That's interactivity – the thought process that goes on in your head as you react to the messages given out by your Mac. It's been with us ever since the desktop computer was invented – using a simple word processor is an interactive task – but lately, technology has opened up new ways to exploit the interactivity process.

The explosion of multimedia – the combination of sound, graphics and video on your Mac's screen – means that more and more people are using their computers for interests other than basic work duties. In particular, the Mac has become a stage for education at all levels – from the toddler learning to read to the doctor studying the latest medical techniques. It's all part of digital publishing – packaging information as computer code, or 'zeroes and ones' as Macromedia's CEO Bud Colligan calls it, rather than as printed paper or film on videotape.

As digital publishing grows, multimedia is becoming as vital a part of many people's lives as books or television, another way of receiving information – but with the added bonus of giving you more control over what you see and hear. In turn, the industry where these publications are created – or authored – is growing fast. The firms that provide the tools for authoring are thriving, as their predecessors who brought you desktop publishing (DTP) did ten years ago. See the 'Why multimedia now?' box for one view of the state of today's authoring industry.

Now multimedia authoring is breaking out of the studios of the professionals and is reaching homes and schools, just as DTP did before it. You no longer have to rely on what's placed on the shelf for you to buy; you can also create your own multimedia, putting out your own messages in fresh and dynamic ways.

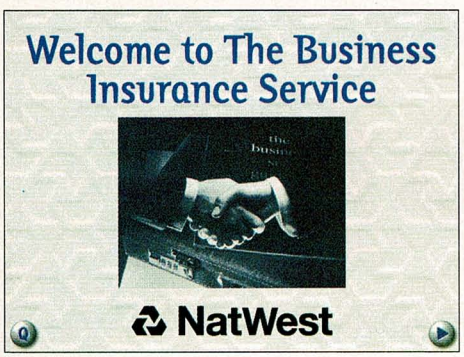
Do it yourself

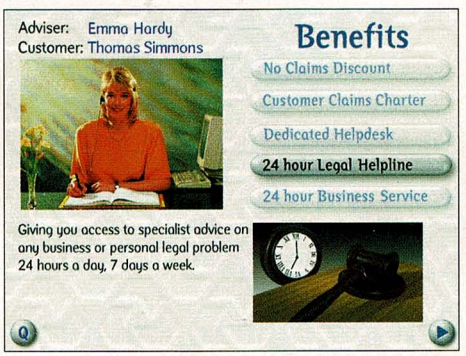
Whether you earn your living from design, or you're experimenting at home, there's a multimedia authoring package to suit your needs and pocket. This issue we take a look at the wide choice open to you.

What the programs we survey here have in common is that all they essentially do is help you to put together your multimedia concept, to assemble your chosen raw material into a smooth whole. They create self-contained programs that you can pass to friends and colleagues, use in education and training, or package up and sell. Many programs, including *Director*, give you the ability to create software not only for Mac owners, but also for users of PC-compatible machines too.

Whichever program you choose, you'll still need to create your building blocks – the graphics, video and sound you want to piece together. You can do this with the many tried-and-tested resources Mac owners have enjoyed for years – using programs like *Illustrator* or *ClarisWorks* to create the text and graphics, for example, or *Premiere* to edit together video clips.

Once your segments of information are ready, you can piece them together using your author-

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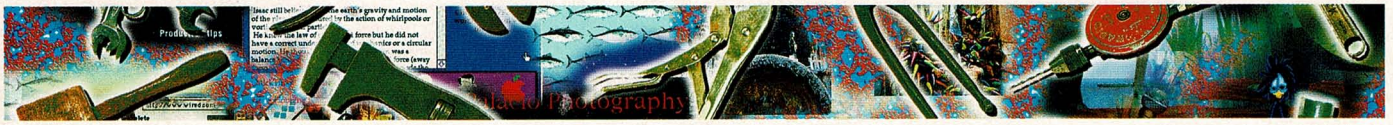
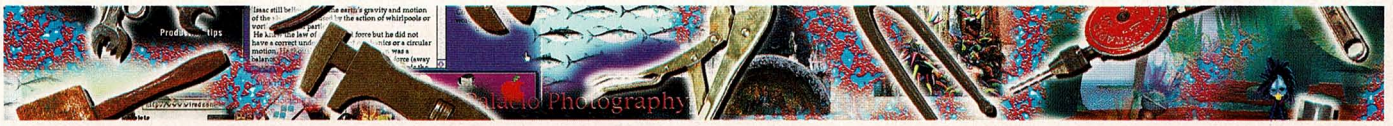
THE DESIGN COMPANY

A high street bank commissioned the Ashford-based Design Company to take it into the multimedia age: the result was this long-distance consulting system made with *Apple Media Tool*. You sit down at a computer in your own branch, using a live video link-up to ask questions to a financial advisor at a larger main branch miles away. You start by filling in a questionnaire with your details and needs, which is sent down the line to the advisor. The advantage for your consultant is that that she can quickly review your case, then spend time focusing on your needs, while getting through more customers. And multimedia is used to communicate concepts more clearly, like the way different types of locks affect your insurance premiums, for instance..





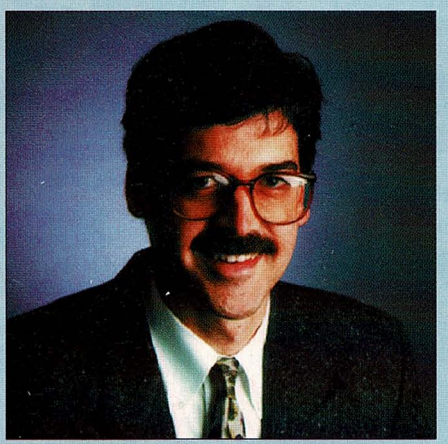
WHY MULTIMEDIA NOW?

Macromedia is the company behind the top authoring program *Director,* and is one of the major forces in the booming multimedia scene. The firm's boss, Bud Colligan, has seen it grow fourfold in just three years. 'The development of Macromedia really reflects the development of the multimedia market,' he says. 'When we took off in 1993, it was based around the fact that the fundamental conditions for market growth were finally in place.

'People say the Macintosh, the LaserWriter and *PageMaker* made desktop publishing. We had the Macintosh, we had tools like *Director* and *Authorware;* what we didn't have was cheap delivery. The LaserWriter was that for paper; we needed that for interactive display and that was finally CD-ROM.

'The second thing was the emergence of QuickTime and having it bundled into every system. Video and animation playback became a standard part of the operating system.

'The third thing was the general evolution of processing power and hard disk storage, so that you had systems that were proficient for playing back multimedia. Back in '89 we used to do lots of demos at shows – we used to have the Mac II with 16Mb of RAM and people would go "Wow, that's neat," and then they'd go home to their 2Mb system and a limited hard drive. There was kind of a discontinuity between what we could show and what everybody had.'



Bud Colligan: 'The development of Macromedia really reflects the development of the multimedia market.'

Now multimedia is reaching out beyond CD-ROM to encompass the Internet. Macromedia's own *Shockwave* is one of the programs being used to improve the quality of Web pages. 'The Internet is another publishing medium,' says Colligan. 'If you think about the files that your programs output, they're just zeroes and ones, right? It's all digital.

'For us, the World Wide Web is just an extension of what we already do. Because our tools build graphics, animation, 3D – regardless of whether that is printed, in the interactive form either on CD or the Web, or it goes out to videotape. Those are just different distribution media for the zeroes and ones that our tools create.'

ing program. Whether it's the sophisticated *Director* (reviewed on page 50) or the relatively simple *Astound,* most authoring software follows the same basic pattern. You'll use it to set up pages – screens of graphics and video material, utilising the program to connect it all together.

Video clips or animations can be activated when you click on a trigger control, either a clearly-marked button or a 'hot-spot' concealed within an image. Buttons are also used to control access to other pages.

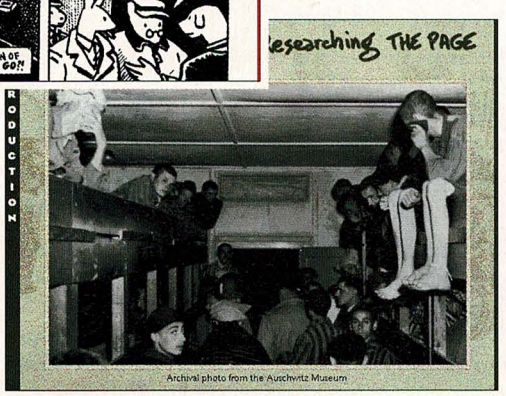
The contents of each page, and the way they interact, can become increasingly complex as the authoring program you use moves up the range. And as you'll see when you visit the Multimedia Corporation on page 44, you may need to go beyond these authoring tools to create the richest experiences of all.

But don't feel limited by the tools you have; you're only limited by your imagination. Some of the best multimedia programs, including award-winning software such as *The Complete Maus,* from the Voyager firm, were made with *HyperCard,* which you can buy for under £100.

Continued on page 44

PART ONES
PLEASE, TRY TO CONTACT US, YEAREK. MILDOU
WE WENT ALL IN DIFFERENT DIRECTIONS.
AND THE FRIENDS KEPT THEM... UNTIL AVRAHAM'S MONEY RAN OUT. THEN THEY WERE REPORTED.
AND I DIDN'T HAVE WHERE TO GO.
IT WAS NOWHERE WE HAD TO HIDE.
CAN I HELP YOU, MR. SPIEGELMAN?
YES, I HAVE HERE MY SON, ARTIE. I WANT TO SIGN HIM A KEY, SO HE CAN GO ALSO TO MY SAFETY BOX.

PART TWO
ALL NIGHT I HEARD SHOOTING. HE WHO GOT TIRED, WHO CAN'T WALK SO FAST, THEY SHOT.
THE MORE WE WALKED, THE MORE I HEARD SHOOTING.
Documents : Page 218
Prisoner's drawing
TURNING, ROLLING ND. AND STOPS.
SO, AROUND AND RE HE LAY QUIET.



Archival photo from the Auschwitz Museum

VOYAGER

Growing from its roots as a laserdisc video company, New York's Voyager has become one of the world's most popular and acclaimed multimedia publishers. Yet many of its projects are created using the low-price *HyperCard. The Complete Maus* follows the format of many Voyager products, with a simple book-based structure enhanced by helpful search facilities. The main body of work is linked to background material that reveals how the final result was made. Voyager distinguishes itself through thoughtful presentation of complex subjects. Now it is branching out, supporting an eclectic Web site of journalism and promotions, while also sponsoring searches for multimedia artists through the 'New Voices, New Visions' contest.

Continued on next page

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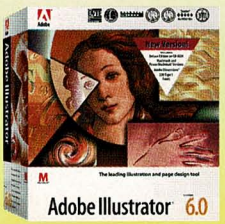

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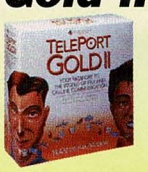

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HOW THEY DID THAT...

The Multimedia Corporation is a breed apart from other firms that create multimedia. Richard Hill visits its offices to discover the MMC philosophy.

COMING SOON

The next Multimedia Corporation projects are expected through Electronic Arts: April's *Wide World of Animals* applies the *3D Atlas* model to natural history, and summer offers you the chance to gain some *World News Insight.*

With their studied air of creativity, and clean, modern lines, the Multimedia Corporation's offices resemble those of many other firms that work in popular media like book publishing or TV. But the work being produced here is appearing on a new medium – the computer-based blending of video and graphics that becomes multimedia.

For the people who make up the Corporation, issues like how a project should be designed and what its contents should be are everyday decisions. And like any group that puts together multimedia, it's developed its own ways of getting the best results.

The MMC's Ciarán Doyle and Robert Hyde are responsible for forming many of the firm's ideologies and working techniques. Doyle says one crucial facet of multimedia shapes their beliefs: 'Interactivity. It's the one element that is alien to all of the other media that are being used today, be it print, be it audio or video. The ability to control that, and the ability to transparently hand that power over to the user, and actually allow him or her to interact with a product, is the hidden ingredient of multimedia.

'It's an ingredient that a lot of people are missing when they bring interactive products to the marketplace. They believe that the hidden ingredient is CD-ROM, or the fact it's on a computer. That's only the starting point.'

You'll see the MMC's creative application of interactivity in titles like *3D Atlas*, a lushly-textured screen guide to the countries and cities of the world. *Atlas* presents you with a view of the Earth, which you can grab hold of and turn round. As other parts of the globe are revealed, you can zoom in and select a particular place you want to learn more about. In this way, the globe that is giving you the information is also acting as your control device, enabling you to discover more.

The MMC's techniques for giving you this level of control come direct from its roots in television, says Doyle. 'Our organisation came from the BBC. It was set up in 1984, and we bring with us a very televisual approach to what a product will look like.

'The essence of good television is delivering information to the viewer, be it drama or the news, so the viewer is able to assimilate that in a pleasant, entertaining environment. And that's what we try to do with our interfaces, in the way we handle the information.'

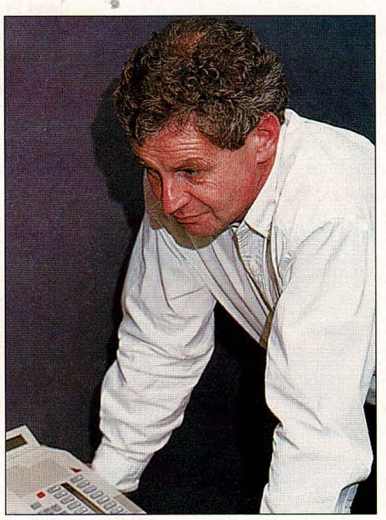
The design of your multimedia starts with the subject you're presenting, according to Doyle. Even the ways different pages are joined together – and which are linked to which – depends on your material. 'If you're developing a product that is surrounding natural history, you have to design it in such a way that it's sympathetic to that subject area. An encyclopaedia has fewer interdependencies, whereas natural history is interdependent because the animals all evolve from the same source.

'Similarly, if you're doing an IQ test, you don't want a 15 second dissolve, because you think, "That's 15 seconds in which I can't answer the question."'

The Multimedia Corporation's Ciarán Doyle: 'The ability to control interactivity and hand that power over to the user is the hidden ingredient of multimedia.'

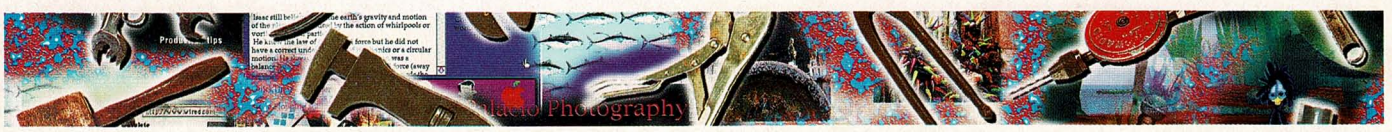
Tools of the trade

The creative process of designing a multimedia title is intertwined with the technical facilities you have at your disposal. Because the MMC has such ambitious ideas, it's found that the authoring programs used by many other firms can't meet its needs. 'If you use an off-the-shelf application, by definition your end results have to look similar to other products which are developed in the same way,' says Doyle. 'You have to play to the strengths of the particular application that you're using.'



Robert Hyde: 'We hope that the person who would buy a couple of good books a month is also going to be buying a CD-ROM a month.'

Rejecting the likes of *Director* and *HyperCard*, the MMC puts together all its work in C++, a programming language used throughout the industry that is, nevertheless, not for the faint-hearted. While authoring programs make it easier for anyone to create



multimedia, Doyle believes the hard work put into using C++ does pay off in the long run. 'It's more versatile, and as you develop your products over the years you are able to bring forward what you've developed before.

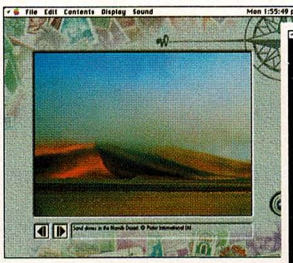
'It definitely means you have to spend more effort on developing your code libraries, and your in-house engineers spend all their time developing the base code which will go through all the titles.

'But that's all about what we believe – we actually believe in the Hollywood approach to developing titles. To sell titles on a sufficient scale to recoup the costs of development, you really have to take a Hollywood approach and say it has to be just mind-bogglingly beautiful on the screen. You have to remove as many restrictions as you possibly can, so the experience that you give to the user is as cutting edge as you can possibly make it. And that means that you have a heavy investment in code, as well as graphic design and production, to bring all of the elements together and make it pleasing.'

Think big

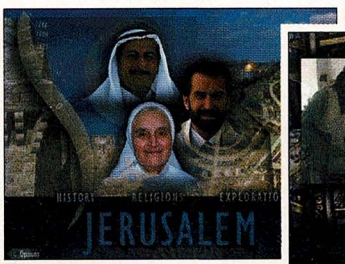
Producing titles for the likes of Electronic Arts and Time Warner, the Multimedia Corporation works on a grand scale, and its approach reflects the world it works in. If you're making a living from creating multimedia on a professional basis, you have to consider who your audience is and how you can sell enough copies of your work to make a living. Ciarán Doyle says, 'If a title doesn't work globally, you're not going to get your money back. And your title has to be globally appealing, because the installed base is so small relative to, say, the amount of people who can read. There aren't many opportunities for niche publishing – unless you can say a niche market will pay 20 times what the retail price is...'

'If a title doesn't work globally, you're not going to get your money back,' says Doyle.



3D Atlas is the CD-ROM that established the MMC as a multimedia force: expect variations on it this year.

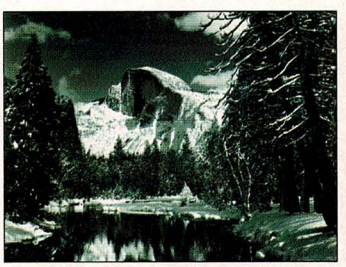
In truth, the global market is more accurately an American-dominated market, but however you look at it, this global-or-nothing situation needn't last much longer, according to Robert Hyde. 'The increase in software sales is at a rate far higher than the increase in costs of development. Let's say the costs of development get 10% more expensive a year; the installed base and software sales in the UK and everywhere in the world are going up at let's say 70% or 80% a year. In two years' time it might be possible to publish a CD-ROM in the UK that was a complete flop in the States and it would work.'



The BBC heritage of the MMC shines through its lushly-produced graphics, here from a documentary on Jerusalem.

Another growing trend is the localisation of American titles – changing the spelling and even the narrator's accent so it feels more appropriate to the people in the country where it is intended for sale. 'American products are perceived as being somehow deficient because they're American, which is silly really,' says Hyde. 'What we need to is to Anglicise and improve a lot of American products – there will be companies that do that, and do it successfully.

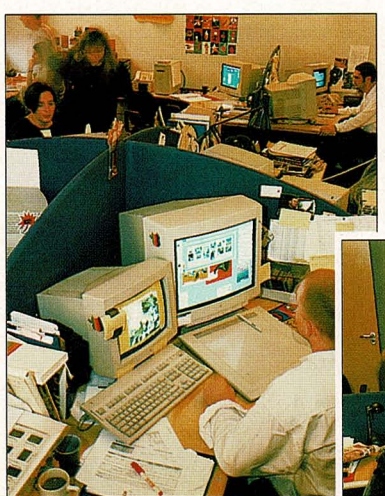
'In book publishing terms, a Japanese book looks entirely different. For a start it reads from end to beginning, but the actual way the design is laid out is also different. The Japanese will want something that is not just an adaptation of an American product. I think in five years' time there'll be indigenous industries that can survive.'

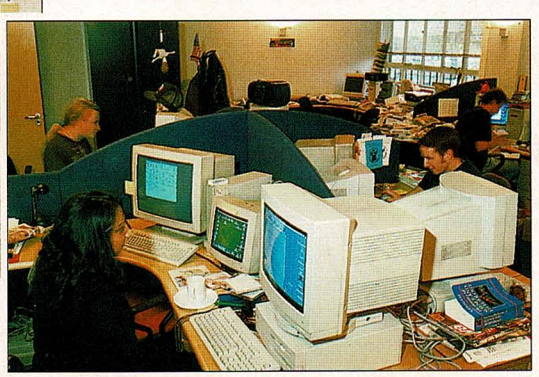


Forthcoming titles will cover opera (top left) and material such as the work of photographer Ansel Adams (above).

The reality of this growing global marketplace doesn't mean the MMC is forced into taking a lowest common denominator approach. The company firmly believes that it can achieve a balance between tackling the subjects it wants to cover, and still presenting them in a clear and, above all, interesting way. 'We're trying to focus these products at a fairly high level,' says Hyde, 'and hope that the person who would go into a bookshop and buy a couple of good books a month is also going to be buying a CD-ROM a month.

'And we hope that we're going to be developing the type of CD-ROMs that person is going to buy,' he smiles. **MF**





The MMC uses separate teams to produce graphics (above) and program code (right), but treats each as an equal creative power, making sure they work together closely.

Continued on next page

START THEM YOUNG

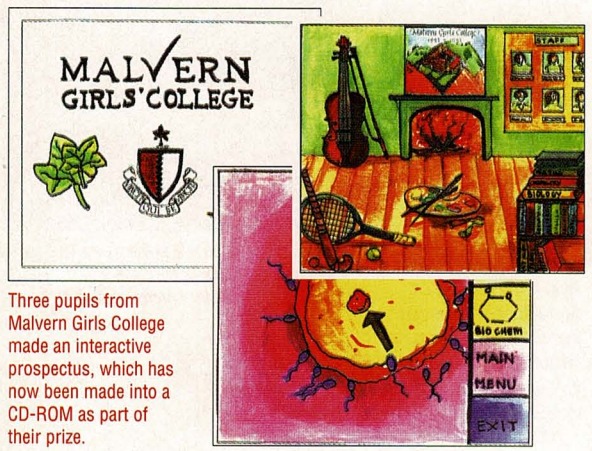
You don't have to work in a ornately equipped design studio to make multimedia, as schools across the country show clearly with self-made productions.

NEMA 96

The closing date for this year's National Education Multimedia Awards is Sunday 31 March, and the awards will be presented in July. For more details contact the National Council for Educational Technology on 01203 416994.

Schools and colleges have been affected by the personal computer boom as heavily as any other part of society. The most exciting part of today's education scene is the mixing of words, pictures, video, sound, animation and photographs that is stimulating pupils and students into new ways of presenting and communicating ideas across the curriculum.

Thanks to the multimedia authoring programs we look at this issue, children as young as five are using Macs to produce games, stories or non-fiction topics with little or no knowledge of scripting or programming, producing inspiring, original interactive work.



Three pupils from Malvern Girls College made an interactive prospectus, which has now been made into a CD-ROM as part of their prize.

An annual event called the National Educational Multimedia Awards (NEMA) showcases the growth of multimedia authoring in education. Pupils use Macs and other types of computer to create interactive programs that make learning fun. All the examples pictured in the box below are winners from the 1995 contest, and were made using Macs.

More recently, three pupils from Malvern Girls College won a chance to have their project made into a CD-ROM. Their interactive prospectus used multimedia to give a better image of their school than any dry brochure. The girls used video of everything from sporting achievements to school dorm pillow fights, adding music and their own illustrations.

With the ease of use of the Mac, digital cameras, cheaper video input and intuitive authoring software, there's little reason why schools cannot produce professional quality multimedia. We've seen all sorts of projects in primary and secondary schools – interactive quizzes and worksheets, guides to the school for prospective pupils and parents, dynamic records of field trips, records of achievement that give more of a feel about the person, and information about topics as diverse as space travel, waste disposal and a trip to Pakistan.

Get involved

There has been a series of Government initiatives since 1987 to encourage the use of computers to enhance teaching and learning in schools, and over £187 million has been spent by Local Education Authorities and schools. On average there are ten computers in every primary school and 85 computers in a typical secondary school, according to the results of a survey published by the Government in 1995.

Particular attention has been paid to CD-ROM pilot projects over the last three years, with the provision of computers, discs and funding for the development of software ideal for primary age pupils. And February saw the launch of a £4 million scheme to get teachers comfortable with technology by giving them access to portable computers and the Internet.

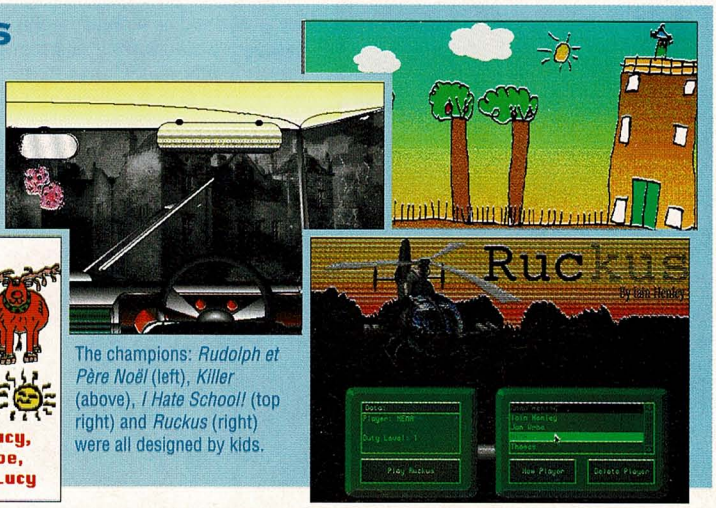
Teachers need only to get their feet wet to see how easy and rewarding multimedia can be. Trying to select software that is appropriate or work out how a CD-ROM can be used within a topic or theme is not always easy. With the tools now available teachers can adapt ideas, plan the curriculum and make the software. **ANDY LAMBERT**

Continued on page 50

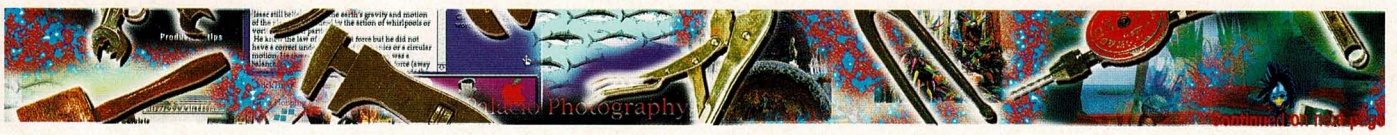
AWARD WINNERS

Four Mac-using schools were among the 1995 National Educational Multimedia Awards (NEMA) winners. Half a dozen six and seven year olds from Inverkeithing Primary School created the interactive story *I Hate School!* using Claris' *Amazing Animation* (rated 90% in MACFORMAT 26). You could learn French with Burley Middle School's *Rudolph et Père Noël*, made with *HyperStudio* by six 13-year-old girls.

Ruckus is a battle simulation that would fit right into our games section. It was designed by four 16 and 17-year-old boys at Wycliffe College, then written in the Think C programming language. And *Killer* is a murder mystery with teachers as the suspects! Six teenage pupils from Southfield School for Girls put this together in *HyperStudio*.



The champions: *Rudolph et Père Noël* (left), *Killer* (above), *I Hate School!* (top right) and *Ruckus* (right) were all designed by kids.



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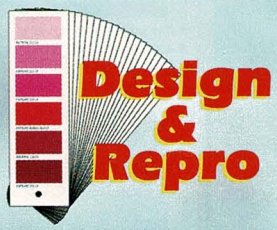

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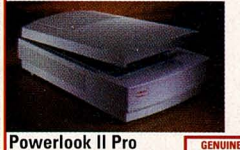

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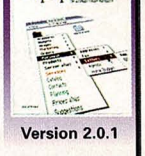

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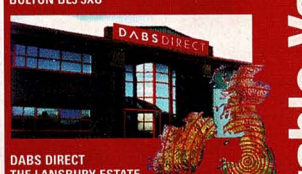

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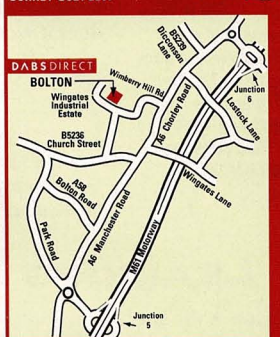

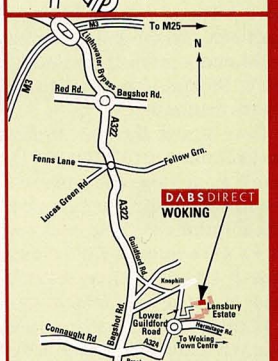

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NOT BAD!

Some of the more famous packages created with Director include *Buried in Time*, *Passage to Vietnam* (both reviewed in MACFORMAT 31), *The Star Trek Interactive Technical Manual* (MF20), *Iron Helix* (MF5) and *PAWS* (MF22).

Over the last three years Macromedia has gone from being an almost unknown software house to market leader in the rapidly expanding field of multimedia creation. The main engine behind this growth has been its multimedia authoring program *Director*. *Director* enables you to combine QuickTime video, stereo sound and user interaction into one seamless production – with minimal training.

Once you've made your production, you can turn it into a standalone projector for distribution to anyone. *Director 4.0* also has the added attraction to developers of offering cross-platform compatibility with Windows. So how does it work?

Key areas

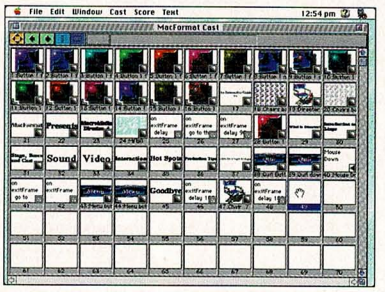
Director builds multimedia projects using a movie/theatre metaphor. The viewing area where all the action takes place is called the Stage, and the objects in the project are known as Cast members. When you place Cast members on the Stage they also appear in the Score window, where you can control their actions using scripts written in a language called Lingo.

Any object, sound, movie, text or Lingo script that you use in a movie is a Cast member, and is stored in the Cast window. You can import graphics and sounds directly into your Cast window from files stored on disk, and while file formats supported are slightly limited, they do include QuickTime movies, PICT images and AIFF sound files. *Director* also has its own built-in paint program which, in theory, you can use to generate Cast members for your projects. In reality, however, the paint window is limited and the tools are clumsy, so it's best to prepare your Cast members in more versatile illustration packages and import them. You can have up to 32,000 Cast members in any one movie, which should be enough for even the largest project.

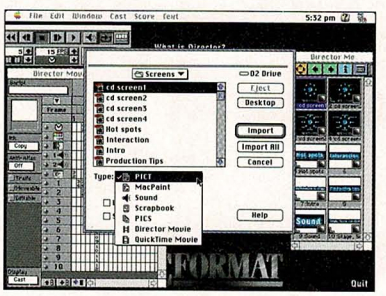
Director's programming language, Lingo Script, is a powerful tool for controlling your multimedia project. It can be complex enough to produce the most sophisticated of movies, but can also be easy to understand if you want to put together simple projects. For example, you can produce the fully interactive project of your choice just by using 'go to' type commands attached to buttons, where the user of your production can simply click a button to go to a different screen.

Lingo commands that are used to control the whole movie can be put into the Script channel of the Score – for example, if you want to pause the movie while waiting for the user to click on an object. You can also apply Lingo to Cast members, to assign specific characteristics. So, if you wanted to play a sound when an object was clicked, you would attach appropriate script to the object.

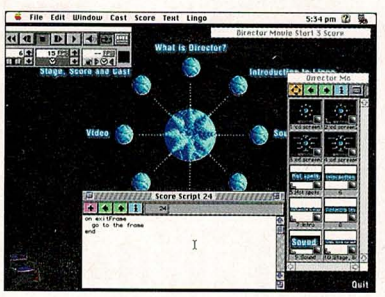
The level of control Lingo offers is impressive, but its key feature is its relative simplicity – you don't need to be able to compile pages of code to get good results. Simple interaction is possible with a few key commands, and once you've learnt a few more you'll be able to polish your productions – improving the speed your movies run



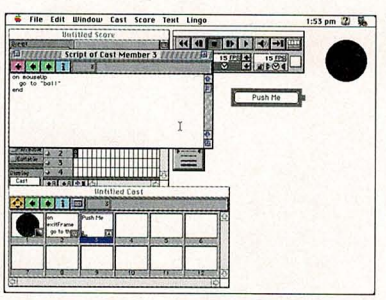
The Cast window stores all the objects, sounds and controlling Lingo scripts for your movie.



Director is slightly limited in the range of file formats it allows you to import into projects.



Simple scripting in the score window is used to control the whole of the project.



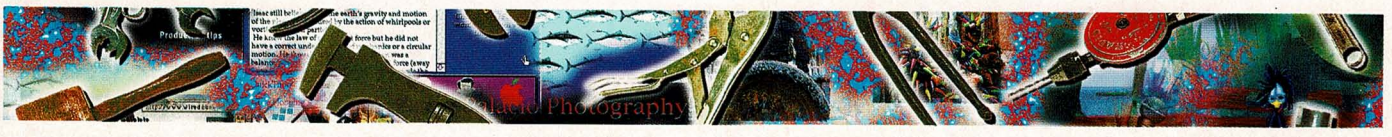
Scripting applied to objects is used to introduce active elements into a production.

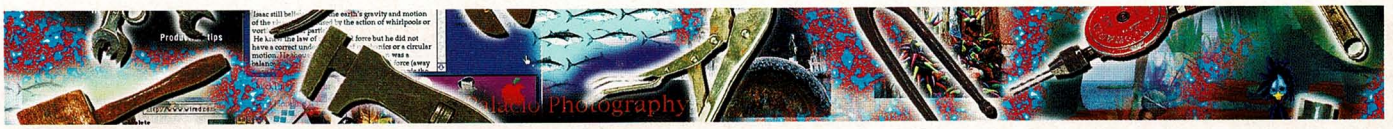
LEARNING DIRECTOR

A sign of the strength of a software package is how many third parties write books or develop training packages for it. *Director* has more helping hands on offer than any other multimedia product available, so if you want to get more out of *Director*, or generally make your life easier, here's what's available.

Gray Matter Design's *MediaBook* CD (£280 from Computers Unlimited, 0181 200 8282) offers a wide range of ready-made Lingo scripts and other resources for you to use in your project. It helps cut production time and gives you solutions to those sticky scripting problems. There's also a £116 tutorial CD – cunningly called *Macromedia Director 4.0* – from Quay 2 (0171 252 0152) which covers most of the key features in an easy watch-and-copy style.

If you prefer to watch a video on your TV, try out the MacAcademy video tutorial option (special prices for MACFORMAT readers – £39.95 each or £174.95 for five, call 0800 834043). To save you reading the manual, Macromedia has produced two CDs, *Director Basics* and *Learning Lingo* (£94 each or £141 for both from CU, 0181 200 8282), both of which are recommended if you want a gentle introduction to *Director*. A new CD-based *Director* training package is being released by Media Training very shortly, so keep an eye on MACFORMAT for more details.



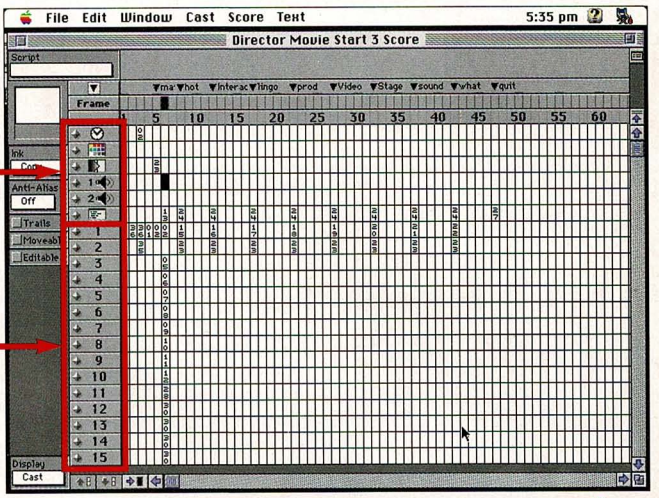


You can simply drag objects straight from the Cast window onto the Stage area.

The Score window is where you control all the action and interaction. First-time users are often daunted by this section of *Director*, with its spreadsheet style interface, but it's reasonably easy if you look at it bit by bit.

Channels reserved for special features such as controlling timing, colour palettes, transitions, sound and Lingo script.

The sprite channels, numbered from 1 to 48. These are where you place the Cast members who appear in your project.



The time line. Each of the numbered vertical columns represents one frame of your movie. For basic control you can place objects across a series of frames in the time line. This keeps them on screen for a specific amount of time.

at, and developing different ways for the user to interact with them.

Director's online help, while not the most intuitive, does help you learn Lingo functions by giving you examples of commands, which you can cut, paste and modify for your own use.

Any good, then?

You can use *Director* for a wide range of projects. The most basic might be simple slideshows, which move along after a time interval or click of the mouse, but to use *Director* purely for this kind of work would be to underutilise its true power. *Director's* real strength is the ease with which it combines a wide range of media, such as sound and video, to make games and educational packages that give your production's users a good level of interaction and participation.

Then there's its cross-platform Windows compatibility. While you're not likely to transfer a Mac-produced *Director* project straight to a Windows system without any extra work, the amount of conversion required will probably be much less than using other software, and most of the difficulties will be down to problems such as incompatible fonts rather than *Director* itself going wrong.

Director is undoubtedly one of the most versatile multimedia development tools available. New users can get good results, while experienced developers can create polished interactive spectaculars. The biggest drawback for new users is the cost: at over £1,000 *Director* is hardly an impulse buy. But high end multimedia is a expensive business, and if you are thinking of becoming a developer, you should take a good look at *Director*. **MF**

ON THE BOOK FRONT

There are many books which may help you perfect your multimedia skills. Some offer tips and tricks; most have a CD-ROM included, which shows you examples of what's possible, how it's all done and how to be creative.

We've looked at the following three:

Macromedia Director Design Guide
Cathy Clarke & Lee Swearingen
£27.50. Hayden Books
ISBN 1-56830-062-X
Design orientated, but there are some good general tips included.

Macromedia Director Lingo Workshop
John 'JT' Thompson & Sam Gottlieb
£41.50. Hayden Books
ISBN 1-56830-201-0
This one's written by the inventor of Lingo Script and offers good tips on Lingo programming, but is a bit on the technical side.

Official Macromedia Director Studio
Tony Bove & Cheryl Rhodes with Marc Canter & Stuart Sharpe
£37.49. Random House
ISBN 0-679-75321-4
This book is quite general and doesn't get technical. The CD has examples of *Director* Movies for you to see how they're made.

The following are other books to look for (and at?) in your local bookshop:

Macromedia Director: Your Personal Consultant
Scott Fisher
£22.99. Ziff-Davis Press
ISBN 1-56276-306-7

Macromedia Director 4 for Dummies
Lauren Steihauer
£18.99. IDG Books Worldwide
ISBN 1-56884-916-8

Director 4 for Macintosh Visual Quickstart Guide
Andre Persidsky & Helmut Kobler
£15.95. Peachpit Press
ISBN 1-56609-138-1

Director Demystified
Jason Roberts
£32.95. Peachpit Press
ISBN 1-56609-170-5

DIRECTOR 4.04

Price: £1,173.83. **Out:** now.
Requires: LCII, 4Mb of free RAM, System 7, 13-inch monitor, 30Mb of free hard disk space.
Contact: Computers Unlimited on 0181 200 8282

FEATURES 94%
A wide range of features which give you a great deal of power.

EASE OF USE 89%
Simple projects are easy but more complex tasks require more work.

DOCUMENTATION 92%
A comprehensive collection of manuals and tutorials.

VALUE FOR MONEY 85%
Expensive, but for the range of features it's hard to beat.

MACFORMAT RATING 90%

THE PERSONAL TOUCH

If you would like personal help, you could try the *Director* mailing list. Be warned: this is a very busy list and you may well find yourself overwhelmed with over 100 e-mails a day. If you want to try it out, send an e-mail to **listserv@uafsysb.uark.edu** with the message: **SUBSCRIBE DIRECT-L** and your full name

Continued on next page

CRACKING KITS

There's a fully working demo of *Apple Media Tool 2.0* on the Cover CD

They might be out of reach of the pockets of many, but these are the systems the professionals use – to make the multimedia discs that you buy.

APPLE MEDIA TOOL

Apple has used its own *Media Tool* to create some presentations, including this video guide to Macs.

Apple's own system for creating multimedia projects actually comes in two parts, which people with different skills can use together. *Apple Media Tool* enables individuals, companies, design studios and schools to create complete projects; while *AMTPE* (Apple Media Tool Programming Environment) adds to *Media Tool's* capabilities with extra features for programmers.

You can use *Apple Media Tool* to create fully-fledged multimedia titles without having to immerse yourself in programming at all: you can build up a project using pieces of text, images, sound and QuickTime video clips. The *Triptych* discs reviewed on page 108 this issue were made using the program, for example.

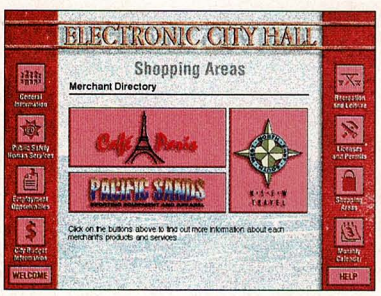
The newest version of *Media Tool* adds features including the ability to drop virtual reality QuickTime VR clips into your project – it's the first authoring program to offer this. All of the different elements with which you assemble your piece can now be added simply by dragging and dropping them into *Media Tool*.

The program design means you can work on different elements at different paces. For example, if one part of the program is lagging behind the rest, you can still link it up with other areas, then drop in the finished section later without disturbing the links you've made.

AMTPE is aimed at professional software programmers, enabling them to get behind the *Media Tool* features and adapt them to their needs. You need to buy it separately from *Media Tool* itself.

- **Price: £428. Out: now.**
- **Requires: Mac IIci or better, 4Mb of RAM, System 7.1 or better, CD-ROM drive.**
- **Contact: Claris on 0181 756 0101.**

AUTHORWARE



Create an interactive travel brochure with the simple planning tools and speed of *Authorware*.

While *Director* is Macromedia's main authoring program, it also offers *Authorware*, which is just as powerful but easier to use in many ways. It's hardly cheap at over £4,400, but the cost includes the rights to use and sell your creation freely without having to credit Macromedia as you must do with *Director*.

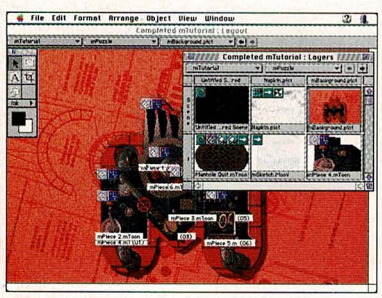
The two programs are in fact linked so closely that you can open movies made with *Director* in *Authorware*. The controls are almost entirely graphically based, with icons to represent different functions like displaying text, moving a graphic around the screen or responding to the click of the mouse button. By arranging these into the appropriate formation, you can create your project with ease.

There are almost 1,000 ready-made graphic objects you can place inside your projects, including buttons and sliders, as well as 75 templates for entire project designs.

Authorware is particularly suited for designing software like training programs or the interactive kiosk material you'll see in shopping malls. You can link sections within your project to pieces of text to create extra on-line help facilities for your user.

- **Price: £4,406. Out: now.**
- **Requires: LCII or better, 4Mb of RAM, System 7, 20Mb of hard disk space.**
- **Contact: Computers Unlimited on 0181 200 8282.**

MTROPOLIS



Assemble virtual tools you can include in projects over and over again with the powerful *mTropolis*.

The most expensive of the systems here, mFactory's *mTropolis* is designed to give you complete control over your projects, with features that enable you to create for CD-ROM and the Internet using the same materials.

With *mTropolis*, you can create objects that behave in a certain way, which you can then use in more than one project. For example, you could design a single door that opens when you click on it – then place the door in different programs.

This object metaphor is extended to the program itself, so you can add new functions to the software as multimedia technology develops. It means you only need to create your project once, even if you want it to work on computers apart from the Mac.

A necessarily complex system is made easier to use with drag-and-drop features and several different ways of viewing the progress of your work. The price includes the full rights to use and sell what you've made freely. At over £4,500, *mTropolis* is clearly intended for the most demanding of design studios – it's been picked up by Activision, Virgin and Simon & Schuster among others – but the ideas used here will make their way into other products from mFactory. **RICHARD HILL**

- **Price: £4,577. Out: now.**
- **Requires: LCIII or better, 8Mb of RAM, System 7 and a double-speed CD-ROM drive.**
- **Contact: Mekon on 0181 288 9994 or you can e-mail Mekon atmtropolis@mekon.co.uk**

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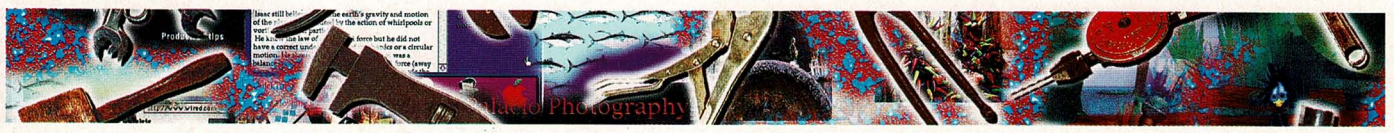
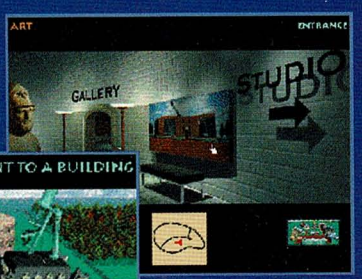


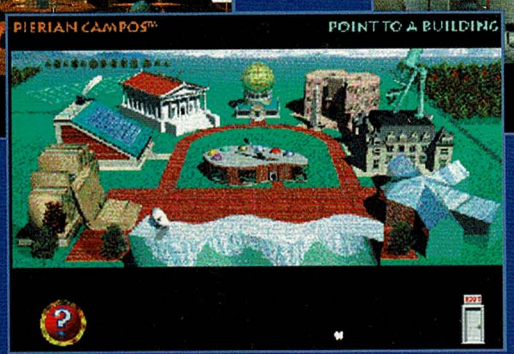
FROM GOMARK DESIGN

INFORM

EDUCATE

Super Red
Do you want to go inside?
Well, now that you've decided whether you need those extra doors, do you want to go inside? Or do you want to walk your iguanas around the car?
TOYOTA TERCEL





TRAIN

SUPERCARD 2.5 BUNDLE

FEATURING:

VIDEOSHOP 3.0 • AUDIOSHOP 2.1 • MORPH 2.5

SuperCard the ultimate tool for multimedia authoring. Version 2.5 is the perfect application for producing training and educational projects, creating CD-ROM titles, developing multimedia brochures and much more.

SuperCard has an easy-to-learn scripting language and features 24 bit colour support, enhanced QuickTime movie capabilities, improved card to card transition, digital audio support and over 40 new SuperTalk enhancements. SuperCard 2.5 maintains its position as the fastest most powerful tool for assembling and delivering interactive multimedia content and custom applications.

ENTERTAIN

PRESENT

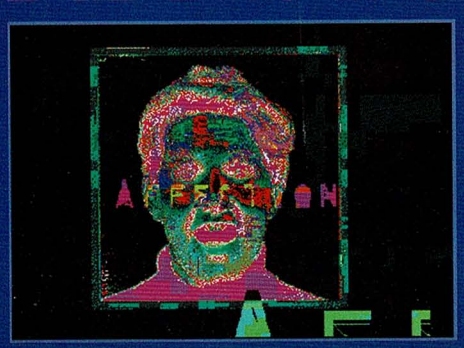
The SuperCard Bundle includes: ***VideoShop 3.0*** the video editing tool that makes it easier than ever to create QuickTime movies. Drag video or audio clips into the Timeline for powerful cut, copy and paste editing. And watch your movies while you make them with the instant preview.

AudioShop 2.1 the best Macintosh sound editing utility, uses a unique CD player interface to playback and manipulate both Macintosh sampled sounds and compact disk audio tracks.

Morph 2.5 create amazing, smooth transitions between images, or distort a single image to create a number of special effects.

£333

IMPRESS



SPECIAL

The STUDIO 9 Bundle

Gomark Design now offer a spectacular bundle featuring SuperCard 2.5 and 8 other powerful products for the complete multimedia studio. Featured products are: SuperCard 2.5, VideoShop, AudioShop, Morph, CameraMan, Infini-D, LogoMotion, TexturScape and Collage. **£899**

For more information and details on the SuperCard 2.5 Bundle or the Gomark Studio 9 Bundle please contact:

Gomark Limited
10 Hurlingham Business Park
Sulivan Road
London SW6 3DU
Tel: 0171 731 7930
Fax: 0171 610 6257

GOMARK DESIGN

RIGHT TOOL FOR THE JOB

Fancy creating your own multimedia extravaganzas? Rod Lawton looks at seven entry-level packages that make it possible, and at a reasonable price.

What is multimedia? The term could encompass anything from a slide-show to an interactive audio visual presentation, but in essence it is the ability to combine sound, pictures, text and animations in a document or presentation that users can interact with. Simple slide shows aren't enough – in a multimedia application, the user should decide where they go next, what they find out, and what happens.

All the programs reviewed here can do that, but otherwise they're very different. *Kid Pix Studio* is designed mainly for fun, while, moving up the scale a level, *Digital Chisel* and *HyperStudio* help schoolkids master authoring techniques and produce spell-binding school projects. *Astound* and *Special Delivery* are designed to add an interactive dimension to your business presentations; and we also include a couple of fully-blown programmable multimedia authoring development kits, *HyperCard* and *SuperCard*, which can do a lot more than create multimedia presentations.

So how do they compare in the main essentials?

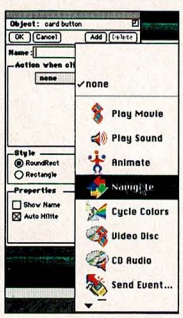
Graphics

All multimedia authoring programs enable you to import graphics, but it's also useful to be able to create your own graphics within the program. So it's all down to the range of formats they can deal with, and what you can actually create within them.

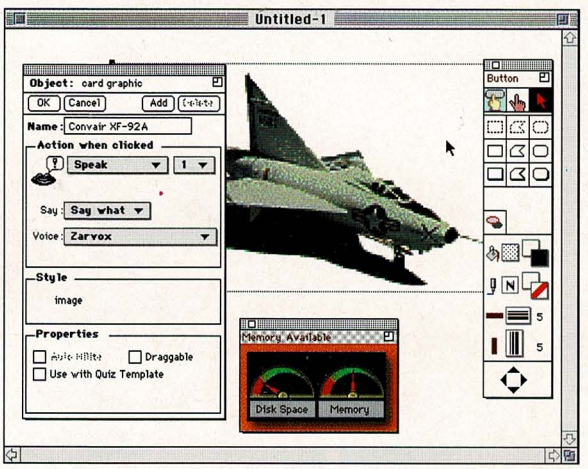
The paint tools in *Kid Pix Studio* defy description. Bit-depths, tool types, gradients and other such jargon have no place here – using an invented language and invented effects you can produce bizarre and unexpected results. It's time to cast off years of seriousness, responsibility and predictability and go back to being a kid – and it really is fun. Once you've found your way around the tools, you can

JUST A FEW QUESTIONS

Digital Chisel's educational roots are clear – it has tools for setting up multiple choice questions and database functions for analysing students' performance.

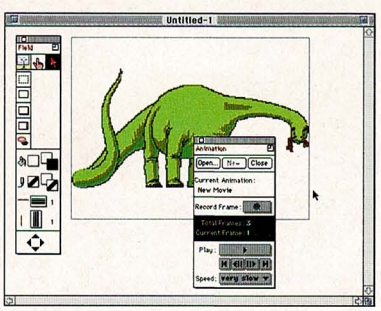


Once you've created a button in *Digital Chisel*, it's easy to get it to carry out the particular action you want via this pop-up menu.

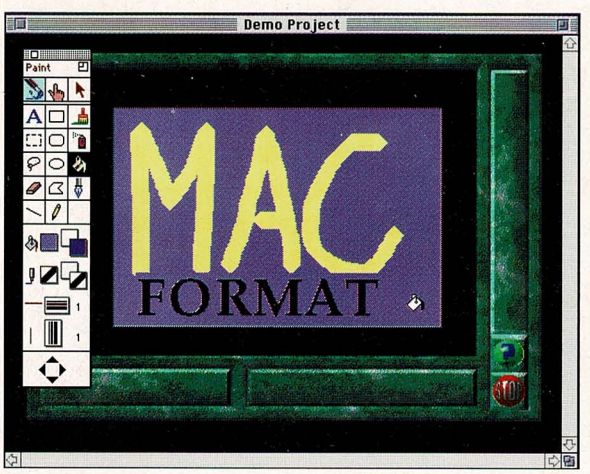


Digital Chisel offers excellent support for text. You can import external files into scrolling fields, apply different styles, colours, fonts and sizes within the field and easily create hypertext links and windows – this one even 'speaks' the highlighted phrase.

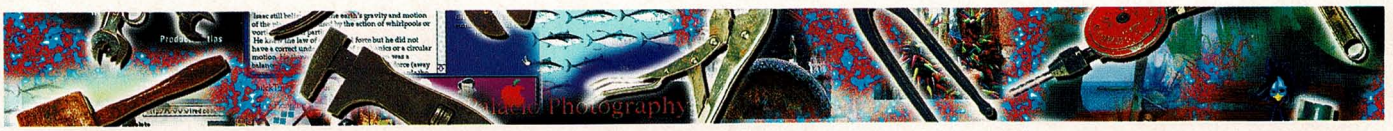
Digital Chisel's 'libraries' give you somewhere to store sounds, images, movies and more – just drag the item you want onto your working area.

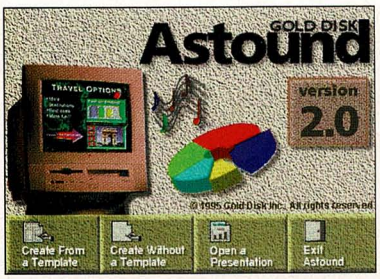


Digital Chisel enables you to create cel-based animations which can be saved separately (you can't edit them later, though).

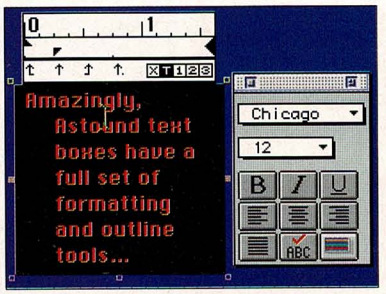


Digital Chisel is no *Photoshop*, but its 8-bit paint tools are perfectly adequate for simple illustrations and effects.

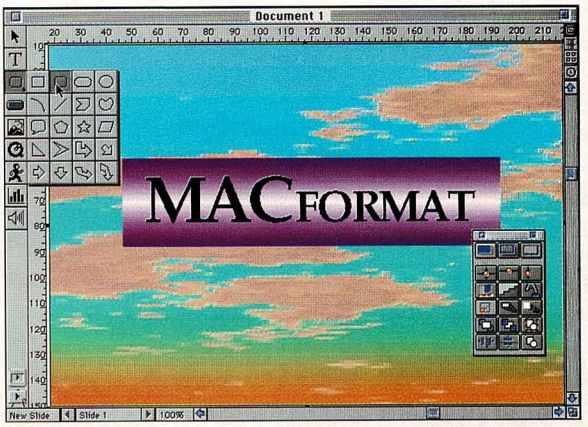




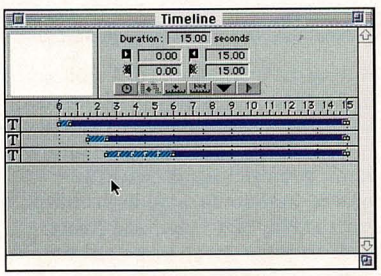
Although *Astound* is primarily designed to be a business presentation tool, its drawing, animation and sound tools make it good for general multimedia authoring too.



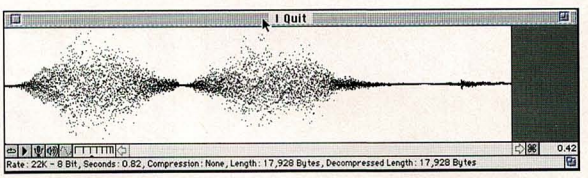
While *Astound* can't import external text files, or even display scrolling text boxes, it has outlining tools and formatting rulers.



Astound doesn't offer any paint tools, but its draw tools are extremely powerful, including textures and gradient effects.



Astound's timelines enable you to choreograph your presentation precisely. You can simply drag the timeline handles to adjust timings.



Astound boasts remarkable sound editing – it can modify sound levels, loop samples, cut and paste whole sections and apply fades to sound transitions.

create all the 'serious' graphics possible in the other programs – but you can also make them fun, unexpected and surprisingly slick using the manipulation tools provided. Even though it's for kids, you should take this software seriously. Just don't expect it to take *you* seriously...

Digital Chisel can create both 'draw' and 'paint' images with its built-in tools. These can only be used for 8-bit (256-colour) images, but you can import 24-bit (true-colour) images. Both the draw and paint tools are on the crude side, without any fancy effects like gradients or textures.

HyperStudio resembles *HyperCard* in more than just name. It too revolves around 'stacks' and 'cards', and there are many other similarities. Unlike *HyperCard*, though, *HyperStudio* can create stacks in up to 8-bit colour (256 colours). Graphics can be part of the card's background, on the card itself, or floating above it as a separate object. *HyperStudio* can import a wide range of graphics formats – PICT, TIFF, EPS, JPEG, BMP, GIF, PhotoCD and more. The paint tools are basic but adequate – you can pick colours easily, create text, circles, rectangles and lines, erase portions, change brush shapes and sizes, and more.

Special Delivery brings us back down to earth with a bump. It can import PICTs and PhotoCD images... and that's it. Once they're imported, you can't edit them (although you can crop and scale them). So if you want anything more than the most basic graphics, you have to create them in another application. And imported graphics can only be shown in 'portals' (a bit like windows), so you'll have to work out how to integrate them with the other data on your slides too.

Astound, the other presentation tool here, offers a comprehensive set of drawing tools. There are no painting tools as such, but you can import TIFFs and EPS files (the bitmap component rather than the high-res vector graphics). The drawing tools offer some unexpected sophistication: you can add textures, patterns, shadows and gradients to all of your objects. You can also convert text to PICTs (for distortion and other manipulation) and select colours from themed palettes to give your presentations a consistent look from slide to slide.

By comparison, *HyperCard 2.3* is a dinosaur. *HyperCard* was written in the days when Mac displays were 1-bit only (strictly black and white), and although it now supports colour, this is only via special colour resources that you have to install in each stack that uses them – and they take an age to load and use. Nevertheless, once installed and running, *HyperCard's* paint tools are reasonably good, although there are no drawing tools as such (all you can create are simple rectangles), and the integration of colour into the application itself is still dismal in comparison with the other programs here.

HyperCard can display colour graphics in separate windows, but making them part of your cards is a laborious

Astound can import and play cel-based animations, and apply paths, entry points and exit points, all choreographed by timelines.

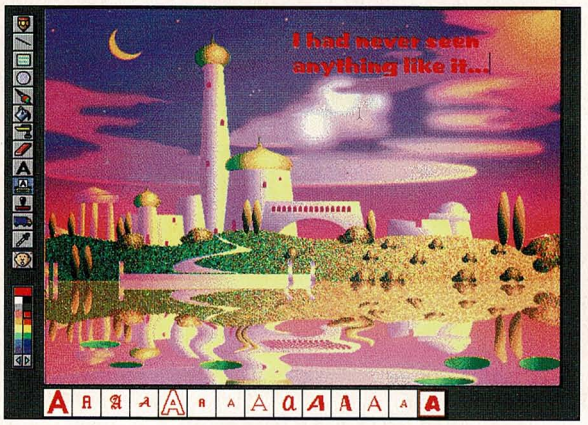
ASTOUNDING

Standard Macintosh QuickTime files won't play on PCs, but *Astound's* cross-platform support extends to its QuickTime editor – it can save PC versions of Mac QuickTime movies.

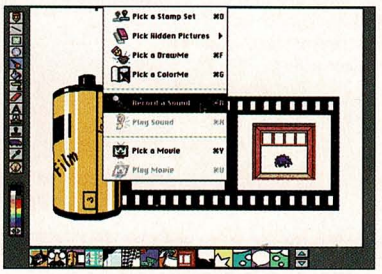
Continued on next page

Kid Pix Studio's paint tools are... unusual. It's easy to paint using fresh, dripping, human blood for example. Or is it ketchup?

Kid Pix Studio can display *QuickTime* movies in Wacky TV documents. You can also add movie windows to pictures.



Kid Pix comes with lots of background images which you can use as starting points for your paintings... er, I mean, images which your kids can use as starting points...



As well as importing them from the big list on the CD, *Kid Pix* can record sounds. All you need is a microphone attached to your Mac, a reasonably quiet room and something intellectual to say.

process. *HyperCard* also ships with *ADDMotion*, software which 'plugs in' to your stacks and enables you to create 24-bit colour images. The tools here are good, and include gradients and antialiasing. You need lots of memory, though, and it's still a fiddle integrating these colour images with your stacks.

SuperCard, Allegiant Technology's *HyperCard* lookalike, offers 8-bit drawing and painting tools, as well as the ability to import up to 24-bit PICTs and TIFFs. As in *HyperStudio*, you create paint images in separate 'windows' on the card, then move them about as discrete objects. Draw graphics exist independently on the card. The way paint graphics are handled, in combination with a variety of ink effects (how superimposed graphics interact) and easy-to-access tools and colours makes *SuperCard* the best of the bunch.

Graphics

***Kid Pix Studio* – good**
***Digital Chisel* – very good**
***HyperStudio* – very good**
***Special Delivery* – poor**
***Astound* – good**
***HyperCard* – good**
***SuperCard* – excellent**

CHEAP AND CHEERFUL

Ignore the fancy paint tools – *Kid Pix Studio* is actually a brilliantly simple tool for creating standalone slide shows, complete with annotations, animated icons and even QuickTime movies.

Animation

All multimedia authoring tools can import and run QuickTime movies. But can they edit them and offer a full set of controls? And do they enable you to animate objects on screen, rather than just playing movies?

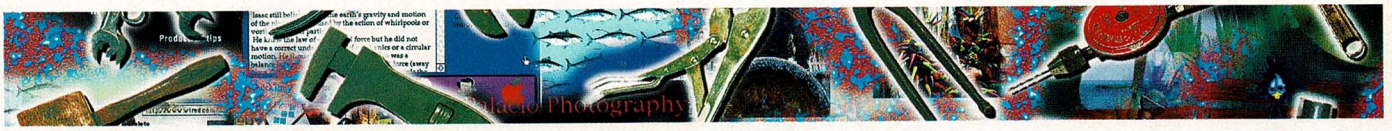
Kid Pix Studio does both. You can play QuickTime movies via the 'Wacky TV', even pasting them into your own artistic creations. And you can create animations using 'stamps' (editable little four-cel animations). You can also create animations via 'Moopies', using cycling colours and other weird, psychedelic effects, and you can save these as QuickTime movies, as standalone applications or for use in a slideshow. There's lots of fun here for kids, and flexibility for adults too – once you work out what the tools do in grown-up language.

Digital Chisel is an educational tool with an altogether more serious attitude. QuickTime movies can be imported and displayed in a window, but you can also create your own path-based or frame-based animations. For a path-based animation, you simply choose the path for an object to follow during the animation. For frame-based animations you 'record' each frame using the simple animations palette.

HyperStudio offers the same functions: you can import QuickTime moves (and use basic movie controls such as Play and Stop), and create path-based or frame-based animations. Path-based animations are easy to create, but frame-based versions are more fiddly than in *Digital Chisel*, which creates a single animation file from your recorded frames. *HyperStudio* requires that you save each frame as one of a series of separate, external files, numbered sequentially. It's easy enough to edit individual cells, and it tolerates gaps in the numbering, but it's still messy by comparison. However, if you have digitising hardware and a video camera, *HyperStudio* enables you to record your own QuickTime movies.

That's a lot more than you can do with *Special Delivery*. With this low-end package you can view QuickTime movies... and that's it. The only way to display animations in *Special Delivery* is by creating them using another application, then saving them as movies. However, you do get a lot of control over movies – notably, the start and end times.

Astound, although also a presentation package, offers many more animation tools. It can play QuickTime movies, and it can apply animations and transitions to different objects on your slides. (These are, effectively, path-based animations.) In addition, you can import PICS animation files (frame, or cel-based, animations) and apply paths to these. The QuickTime movie editor is a formidable piece of work – using it you can change playback speed, trim the start and end, change volume levels, cut and paste sequences within the movie and to



and from other movies, add markers and save the edited version. Excellent.

In this company, *HyperCard* again shows its age. It has an extensible architecture, which means programmers can add plug-in features and tools – just as well. If you want a stack to play a QuickTime movie, you have to go through the laborious process of installing the necessary resources – just a couple of minutes' pointing and clicking, but it's a nuisance. The same goes for the animation tools provided by *ADDMotion* (bundled with *HyperCard* since version 2.2). *ADDMotion* is, however, superb – offering both path-based and cel-based animations, and excellent features for creating and choreographing them. The 'onion-skin' feature in the cel animator enables you to create new cels over a dimmed image of the previous one. As ever, though, opening the required tools within a stack is less than instantaneous.

SuperCard is far more powerful 'off the peg' than *HyperCard* – its animation tools are very comprehensive. Via the MovieMaster palette you can load, view and place QuickTime movies, and create buttons to play them. You can also save your own movies, and create other types of animation too, including frame-based animations in PICS format. You can also create basic but very fast filmstrips, and smooth but relatively inflexible STEP animations. Although there are many ways of creating animations, you can't edit them subsequently.

Animation

***Kid Pix Studio* – fair**
***Digital Chisel* – good**
***HyperStudio* – good**
***Special Delivery* – poor**
***Astound* – good**
***HyperCard* – very good**
***SuperCard* – very good**

Sound

What good is multimedia without sound? All of these applications can play sounds, but how well are they integrated with what's going on, and can you edit sounds, clip them or otherwise manipulate them?

Kid Pix Studio can import sounds in SoundEdit format only, but there are lots supplied on the CD-ROM and it's fun integrating them with the sort of wild pictures it creates. If the sounds provided aren't enough, you can record your own.

Digital Chisel can record sounds and import them, in AIFF format. If you have the Speech Manager Extension it can read to you too – so you could create pictures that say what they are when you click on them.

It's a similar story with *HyperStudio*. AIFF format, Mac sound resources, WAV and MOD files and even MIDI (saved in QuickTime format) are supported. Sounds can be played in the background, so other actions can take place while they're still playing, and you can use *HyperStudio* to control a CD – for example, you might create a stack about Beethoven which plays some of his music while describing it.

Special Delivery offers strong sound support. It can of course play QuickTime movies (which often have sound), but it can also import and play AIFF, AIFC, SFIL and SND files. Once you've imported the sound, you can clip the beginning or end; set it to play once, a specific number of times or to loop continuously; and set the sound volume. Not bad.

Astound goes that little bit better. Sound formats supported include SND resources, SoundEdit/Pro, AIFF, Amiga IFF and WAVE (PC) formats. Sounds can be faded in and out during transitions, and there's a powerful sound editor for more precise control. This enables you to crop the sample, select, cut and paste sections of it, and adjust the volume. Like the QuickTime movie editor, this offers much more power than you'd expect in a presentation tool.

HyperCard's support for sound is hard to evaluate. You can record your own sounds and install them in stacks using the Audio palette, and that's about it – although using HyperTalk, the built-in programming language, you can do more. But if you use *ADDMotion*, you can import and edit SND files – and with a wider range of tools than any of the other applications reviewed here. You can change the

MIND YOUR LANGUAGE

HyperStudio comes with a programming language – a version of LOGO. LOGO is popular among the education fraternity, but rarely seen elsewhere. Here, it's not used to control *HyperStudio* in the same way as HyperTalk and SuperTalk control *HyperCard* and *SuperCard* objects – instead, it's more of an educational 'bonus'.

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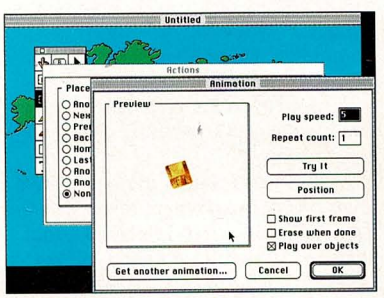
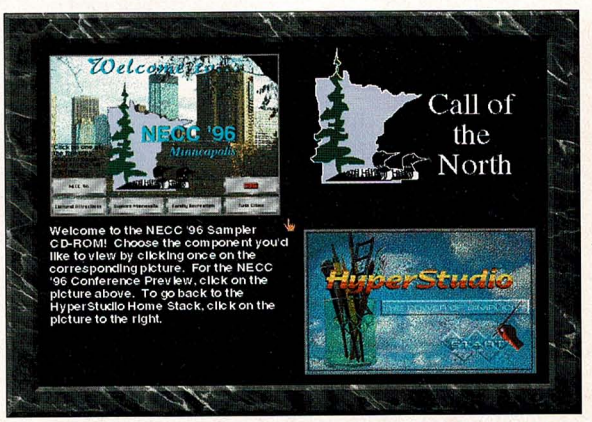
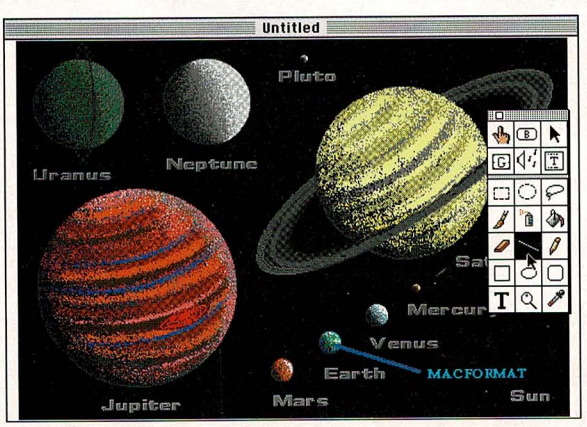
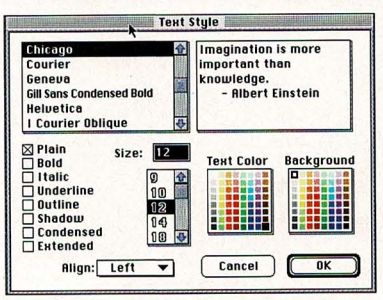


HyperStudio can play frame-based animations using numbered series of external files. It's fiddly, but you can edit each 'cel' and insert/delete cels.


Welcome!
NECC '96
Minneapolis
Call of the North
Welcome to the NECC '96 Sampler CD-ROM! Choose the component you'd like to view by clicking once on the corresponding picture. For the NECC '96 Conference Preview, click on the picture above. To go back to the HyperStudio Home Stack, click on the picture to the right.
HyperStudio

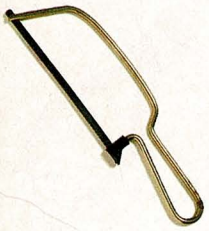


HyperStudio's paint tools offer the usual basic but versatile features common to most of these applications.



HyperStudio can import text files up to 32,000 characters long. What a pity you have to choose a single font, size and style throughout.

HyperStudio's tools enable you to create very professional-looking productions – it's more down to your raw materials and imagination than the application's abilities.



sampling frequency, 'ramp up' or 'ramp down' the volume, add echo effects and more.

SuperCard can also load SND files, but has no tools for editing them (although you can use SuperTalk – its built-in programming language – for controlling various parameters like volume). You can also record sounds and save them as resources or external AIFF files, and if you have Speech Manager you can get your Mac to recite the contents of fields. Competent, but disappointing overall.

Sound

***Kid Pix Studio* – fair**
***Digital Chisel* – good**
***HyperStudio* – very good**
***Special Delivery* – very good**
***Astound* – excellent**
***HyperCard* – very good**
***SuperCard* – good**

Text

Graphics, animation and sound may provide all the spectacle, but much of the hard content of a multimedia product is in the form of text. How well do these applications display large quantities of text? Can you import it? Can you edit it? Can you use hypertext links?

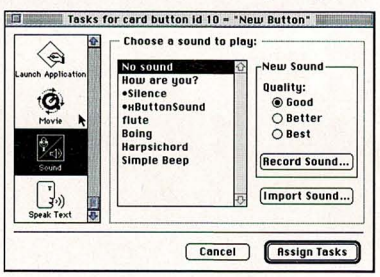
Kid Pix Studio is a graphics-led application. You can add text to your pictures, but it's simply not designed for conveying a lot of textual information.

Digital Chisel, on the other hand, is an educational tool and therefore designed around text as much as it is graphics. It can import any ASCII text file straight into scrolling text field. The maximum number of characters in a single field is 32,000, but that still allows around 6,000 words of text. Within a field you can use different fonts, text sizes, styles and colours. You can also add Hypertext links that automatically create and display pop-up fields containing definitions or comments. These hypertext links can also start movies or sounds playing – you could even get your Mac to speak the highlighted text before displaying a definition.

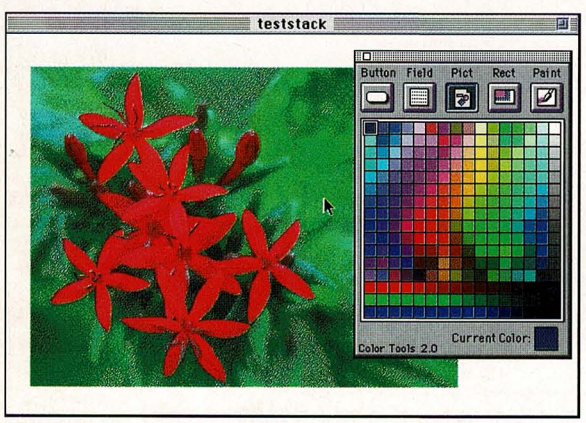
HyperStudio is much more primitive than *Digital Chisel* where text is concerned. Yes, you can import external text files straight into a field (or 'text object'), but you can't apply different fonts, sizes and styles within a field, although you can change colours. There's no instant hypertext facility either. You can do a couple of graphical tricks, like scrolling fields at a constant rate and 'ghostwriting' (adding text a character at a time), but it's poor compensation.

Special Delivery handles text using its ubiquitous 'portals'. Indeed, if you select a portal and start typing you have an instant text field. Unfortunately, there's no way of importing text – the only solution is to cut and paste it from another open file. Portals don't scroll, which limits the amount of text you can display in one go. There's no hypertext interactivity here, either.

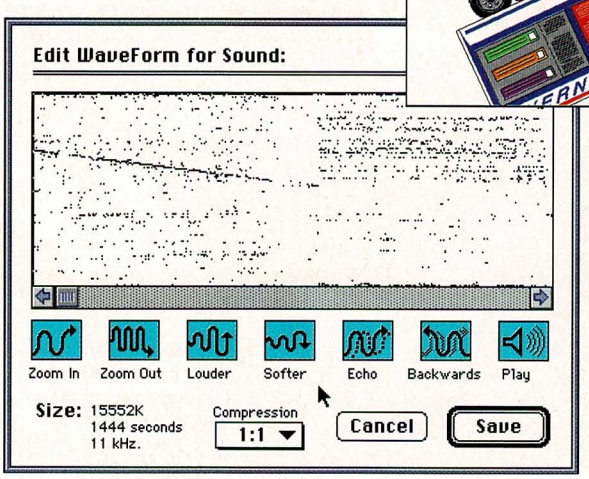
Astound also displays only small

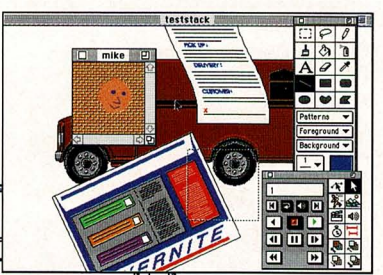


HyperCard's 'button tasks' are new to version 2.3. They remove the need for any scripting know-how when you're creating commonly-used button types.



HyperCard only supports colour via the installable Color Tools. These are fairly basic and, because they're just tacked on, slow to call up and use.





HyperCard's built-in animation and graphics tools are minimal, but it comes with *ADDMotion*, a powerful animation tool, which can then install animations in your stacks.

HyperCard's sound support comes from the Audio stack and also from *ADDMotion*. These enable you to import, edit and record sounds.

HyperCard Extras

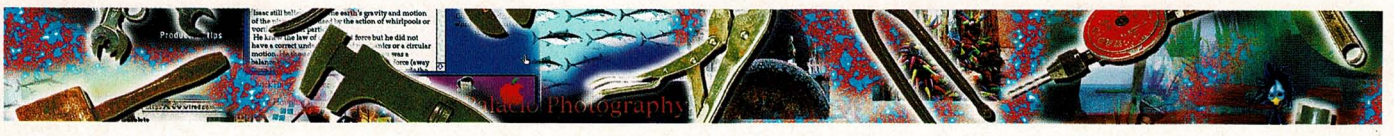
Included in the (largely undocumented) *HyperCard 2.3* bundle are Motion Works' *Multimedia Utilities*. These include:

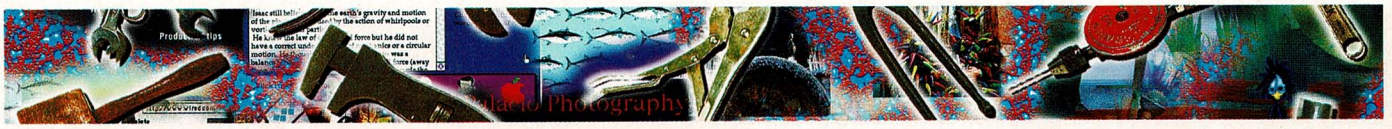
- *CameraMan 2.0* – records all screen activity as a QuickTime movie.
- *QuickEdit* – enables you to manipulate, title and blend QuickTime movies.
- *SoundMate* – records, imports and edits 8-bit and 16-bit sound files in either mono or stereo.
- *QuickMorph* – image transformations using 'mesh' and 'line' control methods.
- *MotionPaint* – combines 24-bit paint and cel animation tools to create QuickTime or PICS animation files.
- *MovieClick* – adds interaction to QuickTime movies (changing sound levels, starting new movies, stopping, playing sounds and more).

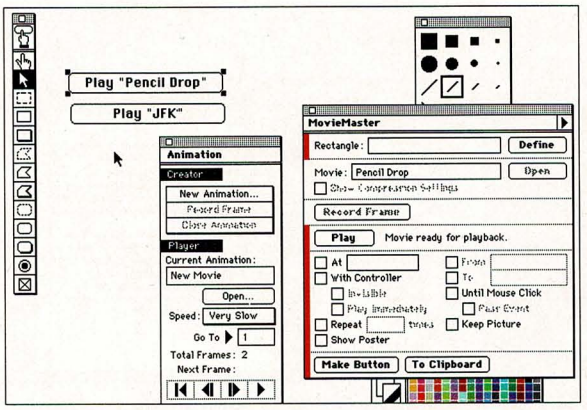
Back in MACFORMAT 30, we reviewed this bundle as a separate product costing over £200 and rated it at 82%, so its inclusion makes *HyperCard 2.3* an even more attractive package, especially at its bargain price. However, unlike *ADDMotion* (also part of the bundle), these are separate utilities which don't work within *HyperCard*, so we haven't included their features in the ratings.

LIFE IN THE OLD DOG

HyperCard may seem a creaky old relic, but don't forget that *Myst* was developed using *HyperCard* – there are lots of clever little ways of disguising its shortcomings. Not convinced? See this issue's tips on *HyperCard* programming, starting on page 70.

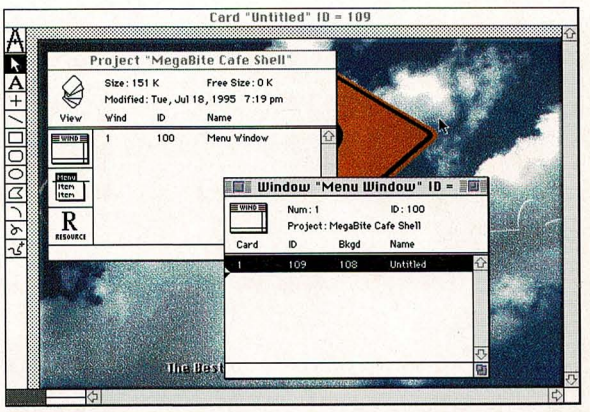






As a development environment *SuperCard* is very powerful, if a little daunting. Productions can choreograph several windows simultaneously, and the *SuperCard* Editor keeps track of them using well-thought-out hierarchical sub-menus.

SuperCard is good at controlling *QuickTime* movies. It can also create a variety of animation types, including the common PICS format.



amounts of text. You do get to see all the text in your presentation as an organisational outline, though, and its find/change and spell-checking functions could save you time and embarrassment later on.

HyperCard has reasonable text handling abilities: its fields can store up to 32,000 characters, and you can add the kind of hypertext interactivity offered by *Digital Chisel*, but only if you roll up your sleeves and get stuck into some fairly heavyweight HyperTalk programming. You need to know some HyperTalk even to import an external text file. Text can be in different fonts, sizes and styles within the same field, but you can't mix alignments.

SuperCard behaves in a similar way. There's the same constraint on maximum field sizes, for a start. Like *HyperCard*, it doesn't directly support importing text files into fields. Like *HyperCard*, it does allow different fonts, sizes and styles within the same field – you can also use different colours.

Text

***Kid Pix Studio* – poor**
***Digital Chisel* – excellent**
***HyperStudio* – fair**
***Special Delivery* – fair**
***Astound* – fair**
***HyperCard* – good**
***SuperCard* – good**

Development environment

Graphics, sound, animation and text abilities are only part of the recipe for good multimedia software – it's how they're put together that counts. A sluggish, confusing development environment can outweigh almost any number of other excellent features. If the programming tools are too tough to figure out, a multimedia application is useless.

The last thing you could say about *Kid Pix Studio* is that it's tough to figure out. Once you understand that conventional multimedia tools and techniques are being described in terms designed for kids, it's easy to use. About the only multimedia authoring involved is the slide show application, where you can combine your Kid Pix, Wacky TVs, Moopies, Stamimators and Digital Puppets into a slide show. You can change the order of the slides, set up transitions and control the time each slide is on the screen... and that's about it. Reasonable flexibility but no user interaction – all they can do is just sit and gawp.

Digital Chisel is arranged differently. Files are called projects, and each project can contain any number of screens – where you put fields, buttons, graphics, animations and so on. You can add actions – such as playing a sound or animation, going to another screen, speaking some text or displaying pop-up windows – to all of these objects. In multimedia, even a limited set of options can offer huge versatility, and *Digital Chisel* combines an easy, quick development interface with great multimedia potential.

HyperStudio is similar in many ways to *Digital Chisel*. Both are aimed at the education market, not necessarily in terms of tools and functionality, but in the tone of the documentation and the types of resources supplied. *HyperStudio* works with stacks rather than projects and, unlike *Digital Chisel*, enables you to create different backgrounds to be shared by cards (screens) within that stack. Multimedia programming is easy: objects can carry out many actions when clicked on, and these are easily selected in dialogues. *HyperStudio* isn't quite as slick as *Digital Chisel*, but it does have extensible architecture, which means additional features can be 'plugged in' – one example is the *MacWebPage NBA (New Button Action)* which dynamically links *HyperStudio* with the *MacWeb* Web browser.

Special Delivery takes a different approach to authoring. Individual screens are called slides. On each slide, you can place portals, which can contain sounds, movies, pictures or text. You create buttons to control these simply by dragging the cursor out of the portal – neat. So, for example, to play and control a movie you'd first create the movie portal, then drag out buttons to load the movie, play it, stop it and rewind it. Buttons can have more than once action, too. Slides can be reordered easily using the presentation 'map', and you can even create different sequences of slides for different purposes. *Special Delivery's* authoring system is simple and beguiling, and goes a long way towards making up for its basic lack of features.

Astound is a much more serious piece of software. Like *Special Delivery*, it enables you to add buttons to control movies, display pictures and text, and move through your slides in any one of a number of preset sequences. The flexibility of its animation tools enables you to create complex sequences of events, which execute simultaneously – you handle these using timelines. *Astound* is more complex to use than *Special Delivery*, but it's capable of much more finesse, and it feels a lot more 'solid' and logical to work with.

HyperCard is a different kettle of fish. It's somewhere between a database and an object-oriented programming tool – it invented the notion of displaying objects on cards stored in stacks. But *HyperCard* has such an open, extensible architecture that it can do just about anything else too, using its built-in programming

WHAT'S IN A NAME?

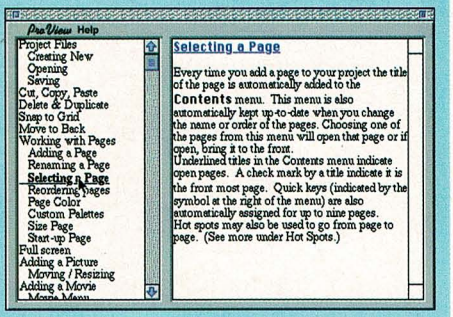
HyperCard, *SuperCard*, *HyperStudio* – what's the difference? Apple's *HyperCard* is the grandaddy of all these packages, and even used to come bundled when you bought a Mac. *HyperStudio* was developed along the same lines as *HyperCard*, but with features devised especially for multimedia production. *SuperCard* is seen by many as the package *HyperCard* should have been. Its commands are compatible with *HyperCard* and its built-in programming language actually incorporates *HyperCard's*.

Continued on next page

ProView

ProView presentations can be run as interactive documents, proceeding at the pace of the user, or as self-running slideshows.

It's easy to add elements to your pages using the simple toolbar, which has (for once) self-explanatory icons. Try it for yourself with our Cover Disk demo version this issue!


ProView Help
Project Files
Creating New
Opening
Saving
Cut, Copy, Paste
Delete & Duplicate
Snap to Grid
Move to Back
Working with Pages
Adding a Page
Renaming a Page
Selecting a Page
Reordering Pages
Page Color
Custom Palettes
Size Page
Start-up Page
Full screen
Adding a Picture
Moving / Resizing
Adding a Movie
Selecting a Page
Every time you add a page to your project the title of the page is automatically added to the Contents menu. This menu is also automatically kept up-to-date when you change the name or order of the pages. Choosing one of the pages from this menu will open that page or if open, bring it to the front.
Underlined titles in the Contents menu indicate open pages. A check mark by a title indicates it is the front most page. Quick keys (indicated by the symbol at the right of the menu) are also automatically assigned for up to nine pages.
Hot spots may also be used to go from page to page. (See more under Hot Spots.)

ProView's on-line help is excellent. Just click on an entry in the comprehensive scrolling index list to instantly see a full description. Not quite AppleGuide, but dead handy.

Arriving just too late to be tested with these other programs (but in time to make it onto the Cover Disk!) is E-magine's *ProView*.

ProView presentations are based around pages, onto which you can put PICT graphics, QuickTime movies and text boxes. You can also add 'hot-spots' for user-interaction.

ProView is very simple to use. A floating toolbar enables you to load PICTs or *QuickTime* movies, create text boxes and define hot-spots. All these elements can then easily be moved around on the pages. Clicking on an element brings it to the front of the stacking order. *QuickTime* movies offer an added bonus, in that their window can be set to 'spring' open on playback to their normal size, from a miniaturised representation (taking up less space on the pages). Hot-spots can be configured (via a pop-up menu) to take users to any other page in the presentation, and they can also play sounds (SND resources), print pages or run slideshows. If you want buttons, you could design them as PICTs, import them and place hot-spots over them.

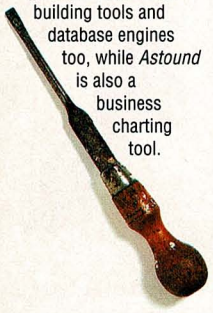
Perhaps the most impressive thing about *ProView* is the way it handles pages – each page you add is automatically added to the Contents menu, which makes it easy to go straight to the page you want at any time. This dynamic linking extends to the hot-spot actions dialogue, where the current list of pages is displayed in a pop-up menu. You can also re-order pages, and choose the opening page.

ProView presentations are designed to be distributed to others, and they can be saved as self-contained *ProViewers* (disabled in the demo version on this month's CD-ROM – you need the application to run your presentations). Amazingly, the run-time code needed to do this adds under 100K to the size of files.

ProView costs £93, which makes it excellent value as an entry-level multimedia tool. And that's combined with an interface that's easy for kids or novices to master. It doesn't have built-in paint or animation tools, or the ability to choreograph lots of complex animations and transitions, but as an easy-to-grasp tool for creating interactive presentations, it's highly effective. Try the demo on this issue's Cover Disk! If you like it, you can find out more from AM Micros on 01392 426473.

Remember

These applications are being rated as multimedia authoring tools. Some do more besides – *HyperCard* and *SuperCard* are powerful application-building tools and database engines too, while *Astound* is also a business charting tool.



language, HyperTalk. This can control external files, *HyperCard* objects (like fields and buttons), text, variables, dates and much more – it's flexible and powerful. That's the good news. The bad news is that, unless you roll up your sleeves and learn HyperTalk (which isn't actually at all difficult), you're limited to some indifferent features and a clunky way of working. *HyperCard* is not a multimedia authoring tool for beginners.

Neither is *SuperCard*. It offers better graphics and animation tools than *HyperCard*, and creates projects rather than stacks. Each project contains many windows, which are the equivalent of *HyperCard* stacks. SuperTalk, its built-in programming language, supports all HyperTalk commands and adds some of its own – in just about every respect it's *HyperCard* with knobs on. Unlike *HyperCard* stacks, you must develop *SuperCard* projects using an editor, then check and run them using a Player, which slows down the development process slightly. However, menus, cursors, sounds and other resources are far easier to handle, thanks to *SuperCard's* well-designed project windows.

It's up to you to decide what you want your multimedia authoring package to be able to do – and how much time you will be able to spend on it. For quick slide shows and presentations, *Astound* has exactly the tools you need *(Special Delivery* gives even quicker results). For more ambitious work with real audience interaction, *Digital Chisel* offers an easy development interface with plenty of power. But for serious flexibility and power, look at *SuperCard* and *HyperCard*. And *Kid Pix Studio?* If you want to have a laugh with your kids and get them used to multimedia basics, it's the best choice.

Development environment

***Kid Pix Studio* – poor**
***Digital Chisel* – excellent**
***HyperStudio* – very good**
***Special Delivery* – good**
***Astound* – very good**
***HyperCard* – fair**
***SuperCard* – very good**

Quality of results

If multimedia is all about combining graphics, animations, sound and interactivity in a great-looking presentation, all of these programs can deliver.

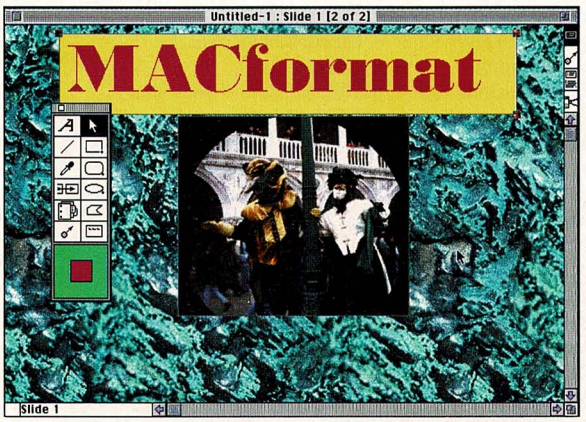
Kid Pix Studio has the most limited tools, but for sheer, zany fun it's miles ahead – and not just for kids. The graphics tools available would be welcome in any of the other packages here, just to provide light relief. But as

Kid Pix Studio

Price: £30. **Out:** now.
Requires: LCII or better (Quadra or better recommended), 4Mb of RAM, System 7.0 or later, CD-ROM drive.
Contact: Brøderbund on 01753 620909.

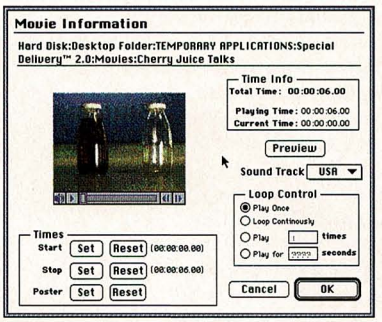
MACFORMAT RATING **79%**

A paradox. Fun, imaginative and easy to use, yet limited to basic multimedia tools – though they are at least amusing variations on those. Top value for money.



You can't create animations in *Special Delivery*, but you can adjust the start/end times of *QuickTime* movies, and choose to play them once or loop them.

SuperCard 2.5 can now handle 16- and 24-bit graphics, although its (very good) built-in paint tools can only handle 8-bit images.



for interactivity... well, there isn't any.

Digital Chisel offers excellent pop-up hypertext definitions, and differently-styled text within fields. Its multimedia tools make it possible to create a wide variety of effects. *HyperStudio* is capable of results of a similar standard. Single-style text within fields is a big disadvantage, though, and makes cards containing fields look distinctly amateurish. The interactivity offered by both is good – you can play movies, display pictures, move to different cards, start animations and so on.

Special Delivery, for all its simplicity, offers excellent background and button graphics. There's not much for the end-user to do except navigate and decide when things happen – but what else do you need from a presentation program? *Astound* offers better animations, more complex choreography of objects and timelines and more finesse. Interaction during presentations is much the same as *Special Delivery's*, but the 'wow' factor is much higher.

HyperCard and *SuperCard* offer programming abilities that enable you to manipulate text, carry out calculations, prompt users for responses, customise menus, open and manipulate additional windows, create floating palettes and much, much more. You'll have to spend more time in development, but they raise user interaction to another plane and are serious application development tools as well as multimedia authoring kits. *SuperCard* offers the best 'off-the-shelf' tools, but *HyperCard* has so much third-party product support that it can more than match it for features, even if the resulting cobbled-together development system lacks finesse.

Quality of results

***Kid Pix Studio* – fair**
***Digital Chisel* – very good**
***HyperStudio* – very good**
***Special Delivery* – fair**
***Astound* – good**
***HyperCard* – excellent**
***SuperCard* – excellent**

Resources

Multimedia relies on more than just authoring software – you also need graphics, sounds and QuickTime movies to work with. These don't grow on trees, and aren't the easiest things to create. Resources included with the software, if nothing else, give you lots to practise with while you get the hang of the program.

Kid Pix Studio comes with a CD full of material: sample slide shows, dozens of QuickTime movies on various themes, and lots of sounds. There are also many background images you can add objects to, and even some black-and-white pictures for you – er, your kids, that is – to colour in. Not only does the program offer you lots of things to do, it offers lots to do it with.

Digital Chisel doesn't come with a CD-ROM full of resources, but these are available from the publisher. For example, the Multimedia Library offers 18 categories of information, from aviation to microbiology – each folder containing explanatory text, a library of the contents, up to a dozen QuickTime moves, a similar number of pictures and a selection of sounds.

The *HyperStudio* CD doesn't offer as many QuickTime movies, but it does include a huge selection of images – and you don't have to pay extra for it.

Special Delivery comes on floppies only. There are some sample files, but there's not much of a selection and you're going to be getting bored with the material by the time you've got the hang of the software.

Astound, again, is more serious. It comes with a CD-ROM containing only a handful of QuickTime movies, but countless 8-bit and 24-bit PICTs, dozens of themed clip-art libraries and a selection of backgrounds – plus lots

BUNDLE OF JOY

SuperCard is currently available in two versions – the standard box reviewed here, and a Multimedia Megastudio Bundle which includes *VideoShop*, *Morph*, *LogoMotion*, *TextureScape* and *AudioShop* for the all-in price of £516. That's a very tempting offer indeed.

TAKE CONTROL

Special Delivery can create entirely self-running presentations, or presentations that run themselves until passers-by click on the mouse button (as they tend to do), whereupon control passes to the user – very useful for unattended displays (but then, so are security cameras).

Continued on next page

DIGITAL CHISEL 2.0

Price: $99 plus $25 carriage. **Out:** now.
Requires: LCIII or better (PowerMac recommended), 4Mb of RAM (8Mb recommended, System 7.0 or later.
Contact: Pierian Spring Software in the US on 00 1 800 472 8578.

MACFORMAT RATING 89%
Very powerful, with simple point and click interface, but no built-in script language or bundled CD full of resources.

HYPERSTUDIO 3.0

Price: £175 (£116 for education users).
Out: now.
Requires: any colour Mac, 4Mb of RAM (more recommended), System 6 or later, CD-ROM drive.
Contact: TAG Developments on 01474 357350.

MACFORMAT RATING 88%
Practical and powerful, although more flexibility in styling field text is needed.

SPECIAL DELIVERY 2.1

Price: £447. **Out:** now.
Requires: LCII or better, 4Mb of RAM, System 7 or later.
Contact: Gomark on 0171 731 7930.

MACFORMAT RATING 48%
Easy enough to use, but basically too limited, even for just a presentation package. For the price, it's simply not good value for money – *Astound* offers far more tools and functions for far less.

of sound and music samples.

HyperCard and *SuperCard* let the side down. Both install from floppies and neither comes with additional resources. Bad show – especially from the two heavyweights.

Resources

***Kid Pix Studio*– excellent**
***Digital Chisel* – fair**
***HyperStudio* – very good**
***Special Delivery* – fair**
***Astound* – very good**
***HyperCard* – fair**
***SuperCard* – fair**

Distribution

Once you've created your presentations, how are you going to distribute them? The makers of all these applications assume that your audience won't have the software to run them, so they either provide cut-down players or give you the ability to create standalone applications.

Kid Pix Studio can create standalone slide shows and animations – an unexpected bonus for a entry-level application. They use up only around 1.5Mb of RAM, and are no more complicated than choosing an option on a menu.

Digital Chisel can't create standalones, but is bundled with a freely distributable player which enables other users to view your creations (but not edit them). It's not as neat as the idea of standalone files, but if you are distributing lots of projects to the same users it makes sense not to have the run-time code embedded in each one. *HyperStudio* too comes with a player which, again, is freely distributable. Interestingly, there's also guidance on producing *HyperStudio* stacks for other platforms, although the different way in which the Macintosh and other machines handle resources limits the scope of any 'common' stacks.

Special Delivery offers no concessions to other users. There's no cut-down player application, and it can't create standalones. That might not matter if you plan on using your own Mac to make presentations to an audience, but what if you want to send a presentation to your boss, or a colleague?

Astound is much more obliging. It comes with a player, so other Mac users can view your presentations, or you can save them as standalone applications. You can save a version that runs on a PC too, and, considering that you won't be able to squeeze any decent presentation on to a floppy, you can also save it in segments.

Both *HyperCard 2.3* and *SuperCard* come with player applications and the ability to create standalones. *HyperCard* standalones are easy to create, but get more complex the more bits and pieces you add (like colour and animations). *SuperCard* standalones are more complicated than choosing an option on a menu – there's lots of resource embedding and optimising to be done.

Astound emerges as the best application for distributing your files, and if you absolutely must have standalones, *HyperCard* and *SuperCard* aren't far behind. Otherwise, all the programs reviewed are very distribution-friendly – except *Special Delivery*.

Distribution

***Kid Pix Studio* – very good**
***Digital Chisel* – good**
***HyperStudio* – good**
***Special Delivery* – poor**
***Astound* – excellent**
***HyperCard* – very good**
***SuperCard* – very good**

The one for you?

So far, we've looked purely at what these programs can do. But price is a critical factor, as is what you want your multimedia application *for*. If it's for some multimedia fun, and entertaining the kids, *Kid Pix Studio* is fantastic, especially at that price.

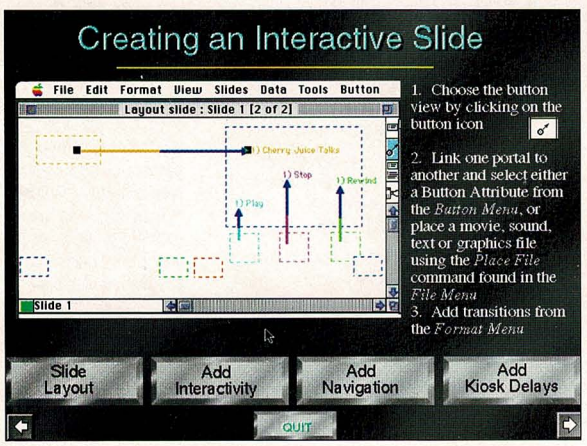
If you want your kids to be educated as well as entertained, both *Digital Chisel* and *HyperStudio* are good bets. *Digital Chisel* has a slicker interface, but many of its features are geared towards teachers rather than students.

For business presentations you have a choice between the simplicity (or even crudeness) of *Special Delivery* and the sophistication (or complexity) of *Astound*. The big shock is the price. *Astound* is twice as good as *Special Delivery* and half the price. Go for *Astound*, without a doubt.

Lastly, *HyperCard* is positively antediluvian by today's standards, but is cheerful, friendly and surprisingly fast. And the current package includes plug-in stacks and resources that drag it well into the multimedia age. In multimedia mode it's not slick, but it is fantastic value. Compare *SuperCard*, at four times the price – is it four times better? In terms of user interface and built-in tools, it probably is. But given *HyperCard's* bundled bolt-on tools, huge user-base and accumulated expertise, Apple's old soldier just scrapes ahead. **MF**

HYPERTEXT

No, it's not another member of the *HyperCard/HyperStudio* clan. Hypertext is the name given to one of the most interactive 'clever bits' of multimedia. It usually takes the form of a word or phrase picked out in a different colour in a block of text. Click on it and you are taken straight to the relevant reference – another page or card, elsewhere in the presentation.


Creating an Interactive Slide
File Edit Format View Slides Data Tools Button
Layout slide : Slide 1 [2 of 2]
Slide 1
1. Choose the button view by clicking on the button icon
2. Link one portal to another and select either a Button Attribute from the Button Menu, or place a movie, sound, text or graphics file using the Place File command found in the File Menu
3. Add transitions from the Format Menu
Slide Layout
Add Interactivity
Add Navigation
Add Kiosk Delays
QUIT

Special Delivery is certainly simple to use. Its system of dragging from 'portals' to create the buttons that control them is odd, but it is certainly efficient.

Price: £222. **Out:** now.
Requires: any Mac, 8Mb of RAM, System 7.1 or later, CD-ROM drive (for clip media)
Contact: Gold Disk on 01734 814230.

MACFORMAT RATING 91%

No paint tools, but apart from that it does a lot more than you'd expect. A top presentation tool which makes handling quite complex actions easy, and surprisingly competent at general multimedia authoring.

Price: £95. **Out:** since 1832.
Requires: any Mac (LCII for QuickTime; Quadra for text-to-speech), 2Mb of RAM (5Mb for Color Tools), System 6.0.5 (System 7.1 or later for full multimedia tools)
Contact: Apple on 0800 127753.

MACFORMAT RATING 79%

A bargain package that does all you could want, although the application is feeble and the environment clunky.

Price: £411. Out: now.
Requires: LC or better, 4Mb of RAM (more recommended for colour), System 7 or later.
Contact: Gomark on 0171 731 7930

MACFORMAT RATING 77%

Far better spec than *HyperCard*, but without the bundled extras. Excellent documentation, and – for a heavyweight – not too difficult to use. Powerful and well featured, but a bit pricey in this company.

WILL YOU BE THERE?

Will you play a part in multimedia's future? As design tools become ever more sophisticated, the challenge of making your audience feel involved remains.

Things move fast in computing – not least in multimedia, as people begin to realise just how much potential is there. And that goes for the firms that sell design programs too.

In the next year, companies such as Macromedia and Adobe won't just add authoring programs to their existing ranges, they'll add multimedia capabilities to their design programs. Macromedia, for example, is adding the ability to use file formats common in Web pages (such as GIF images) to *FreeHand* and *xRes*. Quark is adding multimedia capabilities to *QuarkXPress*: *Immedia* is an add-on program that enables you to manipulate video and animation as you would text and graphics in *XPress*. Developments like these will make it easier to create graphics for print, CD-ROM and the Web from the same source.

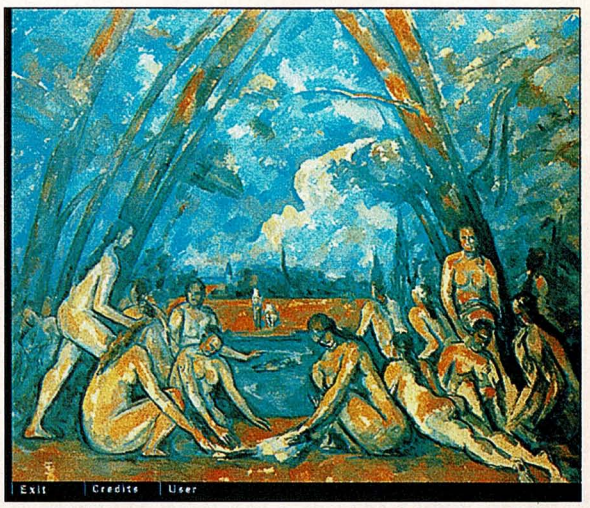
Widening the scope

Multimedia authoring tools are rapidly developing, but what of the future of the medium itself? The recent Milia multimedia festival in Cannes certainly had some pearls on display, but too many creators refer back to old media – books and video – when designing projects, rather than looking at the level of interaction a computer offers.

Doug Rowan, of the comparatively new firm Corbis, has set the firm the task of moving beyond the existing metaphors for electronic media. He describes Corbis' new discs not as book or video-like pieces, but rather as 'cultural adventures' – bringing the level of involvement and active decision making you'd get from an adventure game like *Monkey Island* or *Myst* to non-fiction subjects. 'When you look at TV and you tune in for an hour, you are locked into that,' he says. 'If you want to get a cup of coffee you've got to leave it for a while, you can't shut it down. When you go to a movie, it's the same – there's a beginning, middle and end and it simply comes at you.

'One of the things about television or movies is it's very hard for the individual to ponder a point or to find more information or ask a question... I drive my wife crazy because during a movie I'll say, "What'd they say?" You can't pause it, there isn't any going back and picking up again – and with the electronic form you can really do that, so you can allow the individual to go as fast or as slow as they want.

Corbis takes the term 'multimedia' literally, exploring the story of the atom bomb from all angles.

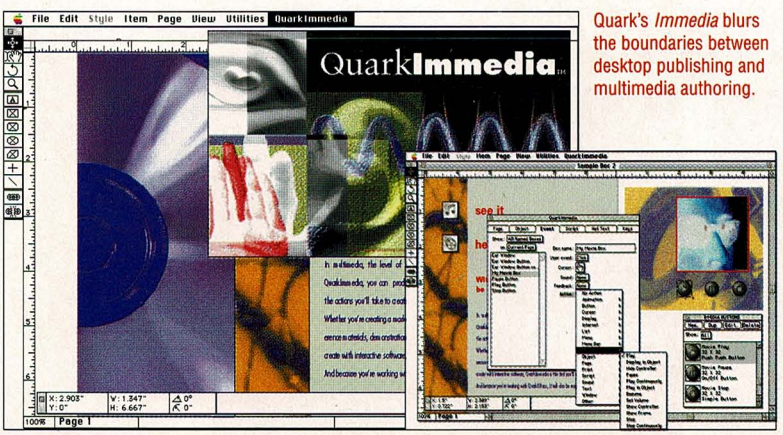


Corbis' new CD-ROM on Cézanne goes beyond the frame to paint the cultural landscape the artist worked in.

'In the publishing area, we are obsessed with something that we call story telling... When *we* deal with a subject, what we want to do is explore it in all of its contextual dimensions.'

Corbis' *Critical Mass*, for example, brings together various views on America's race to build the A-bomb. Rowan says: 'You can see that subject in every way, from the very serious – including documents which were declassified for this title – to pop culture. There's quite a bit in the title relating to two comic strips – *Spider-Man* and *The Hulk*. Both of them really came out of the atomic era. There's some country and western music that was popular at the time; there's a *Flash Gordon* movie sequence. The whole *Flash Gordon* thing in the '30s and '40s is the beginning of pop culture as it relates to the whole atomic period.'

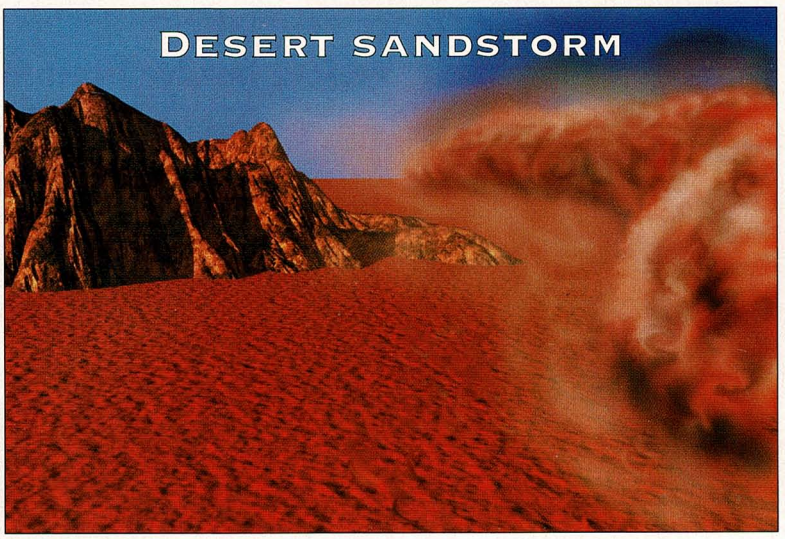
Users of the CD will make fresh connections, says Rowan. 'It makes you feel as though you're having an experience no-one's had before, and as you, the person looking at the CD-ROM, go through it, you feel very much like "I'm there".' **RICHARD HILL**



Quark's *Immedia* blurs the boundaries between desktop publishing and multimedia authoring.

Atmospheric pressure

Most 3D programs are incapable of providing more weather effects than a basic fog. Brian Larkman shows you how to add atmosphere using *Color It!*

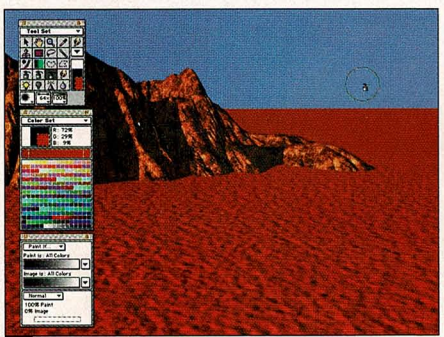


A desert sandstorm, which you can easily create from a basic *KPT Bryce* render by following the steps below, using *Color It!* The closer dust clouds will look more authentic if you give them a little **Noise** – although you'll need to use either *Color It! 3.0.4* or *Photoshop* to do this. If you have either of these, select the dust cloud area with the **Lasso** tool, and apply monochrome **Gaussian Noise**.

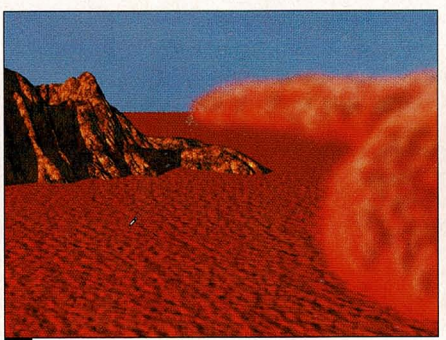
One of the first things any designer should learn about computers is when not to use them. If you work in 3D modelling you have a similar lesson to learn – when not to model a feature, but instead to 'paint' it on to your image. Some details are much easier to add to your work after rendering, and atmosphere is definitely one of them. This tutorial shows you how to add basic atmospheric effects, such as clouds, to your landscape renders.

The original images were produced in *KPT Bryce*, the most accomplished landscape generating program available for any desktop computer, and certainly one of the best at creating atmospheric effects. However, even *Bryce* can't reproduce dust storms in the desert, rainstorms at sea, or smoke from slash and burn clearance in a rainforest – at least not yet.

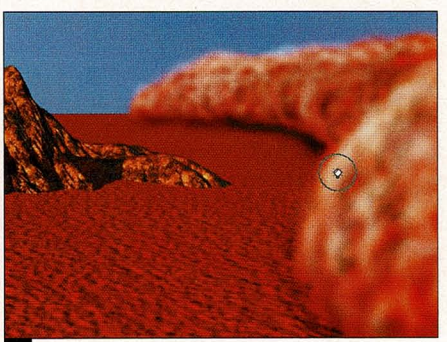
Most of the techniques you require for individual atmospheric effects are described in the following tutorial, but first you need to understand a few



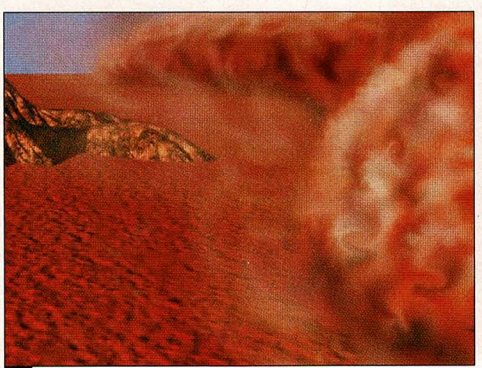
1 Three original renders were created using *KPT Bryce*. Here a barren sandstone texture was used for the rock, and a red sand texture and bumpmap for the desert. Note the arrangement of the tools for airbrushing: three airbrushes of different sizes, alongside the **Finger**, **Lighter**, and **Darker** tools.



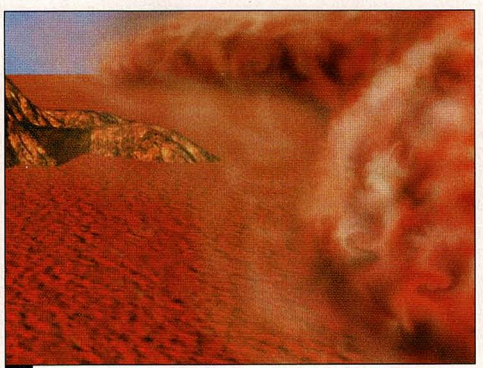
2 The sandstorm is initially sprayed using a medium sand colour, grabbed from the rendered sand using the **Eye Dropper** tool. You can set a range of suitable colours in the gradient bar: click on the palest shade in the render and drag to the brightest orange/red, then release. Hold the **[shift]** key, click on the same red, drag to a dark shade and release. If you repeat the process several times, you'll quickly get the hang of the technique.



3 In *Color It! 2.3.5* airbrushing is too slow to use fluently over a large area. For roundness of form and a feeling of depth, however, you will find the **Lighter** and **Darker** tools invaluable and often faster than large airbrushes. Remember that the bright desert sun shines through some of the sand to give a glowing effect at the top, but a fierce storm can obliterate the light, making the centre of the cloud and the ground below it much darker.



4 Spray the lighter areas of dust ahead of the main storm using the airbrush. To create the feeling of dust swirling into spirals and eddies, you can use the **Finger** tool – although perhaps here it was used a little too much. If you are using *Photoshop*, you can also apply the **Twirl** filter to small areas to further enhance the effect.



5 As the image takes form, you can begin to experiment with a number of tools. Make sure you keep saving your work though – in case you don't like one of the effects. Here the **Darken** tool has been used to create a more brooding electric feeling for the storm. Achieve this by working over the sky, just above the cloud and also into the centre of the clouds.

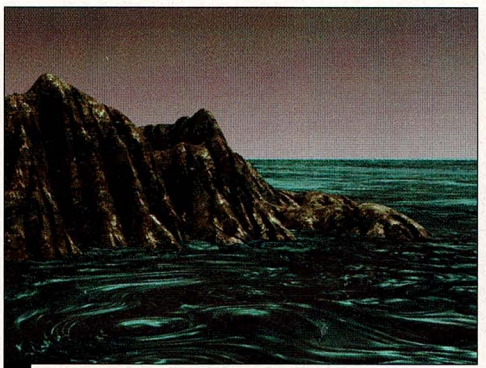
general tricks that will help you make the most of *Color It! 2.3.5*.

The main problem with the program – overcome to some extent in version 3.0.4 – is its sluggishness. If you use a medium sized airbrush, you'll find it difficult to get a realistic sweep and smooth dusting of colour, while with the maximum 60 pixel brush, smooth control seems impossible. On a Power-Mac you are likely to notice this even more because version 2.3.5 of *Color It!* is not PowerMac native. You can, however, adopt a trick to overcome this limitation, by using short strokes with the Opacity and Flow controls set very low. Make sure that you allow each stroke to catch up with your pointer before starting a new one, otherwise you'll end up producing very unpredictable marks.

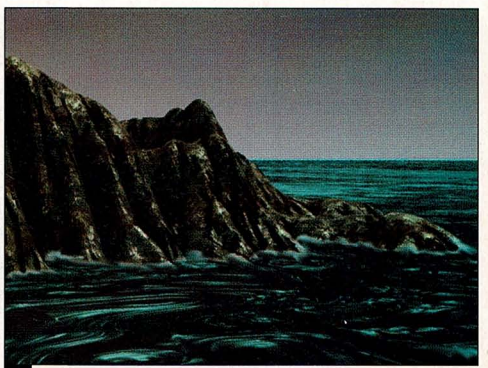
All three effects described here involve clouds in one form or another. To get the characteristic cauliflower-like effect of cumulus clouds or of boiling dust and smoke, work in small, semi-circular strokes. Start at the top and work down in a 'fish-scale' pattern, overlapping each horizontal row and offsetting the next row by half a stroke-width. It is also easier to start with a large brush and paint a darker colour, then overpaint the whole pattern along the top edge of each scale, using a lighter colour and a smaller brush. This technique enables you to create the effect of greater highlight and depth. Okay? Off you go then. **MF**

Once you've added a squall to your seascape, by following the steps below, you can make the squall look more authentic by darkening the overall storm, especially in the sky. Use the **Darken** tool to do this, with the largest brush size.

We gave away *Color It!* on the MACFORMAT 31 Cover CD – see page 117 for details

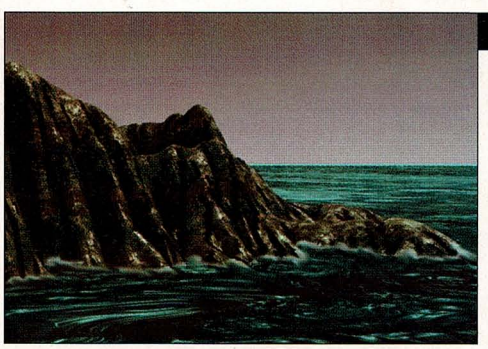


1 The original *KPT Bryce* render had a plain grey sky and didn't convey sufficient feeling of depth. Select the sky area using the **Wand** tool set to 0% tolerance, then you can fill it with a vertical gradient from light to dark grey. This gives a greater sense of depth and, by darkening the top colour, you can create an atmospheric feeling of oppression.



2 The original render in *KPT Bryce* provides a simple, clean, junction between the rocks and the sea, but you need to add some breaking waves to create a squall effect. You can apply a white colour, then smear it with the **Finger** tool, but to achieve it in one step use the **Finger Painting** setting for the **Finger/Smudge** tool. This technique can take a little practice, but the final result is worth the work.

3 Apply rain clouds in the same way as you created the sandstorm clouds, opposite. Use the **Airbrush** and **Lighten** and **Darken** tools set to low opacity, but instead of reds use blue-grey tones. Start with the darker shades in overlapping curves, fish-scale style, using the airbrush to produce the clouds, then add highlights with a lighter colour or the **Lighter** brush. Use a small **Airbrush** and **Finger** tool to produce the rain by dragging up and down at an angle. You'll achieve the best effect if you try to keep these strokes parallel and even.

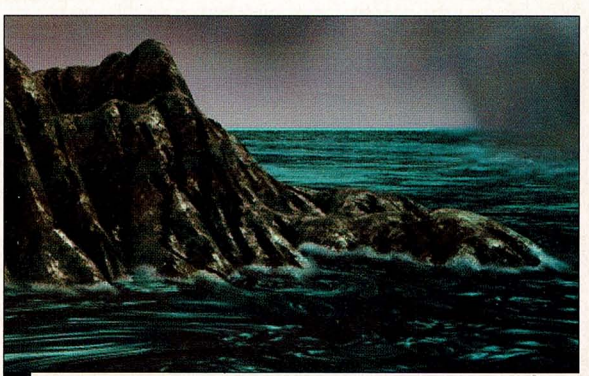


4 The boiling squall waves are produced simply with the **Finger** or **Finger Painting** tool. Again, you should overlap the strokes – fish-scale style – making sure that you vary the size to imply perspective (larger closer, smaller further). It's worth noticing here that the green/blue of the sea still shows through the rain, further enhancing the sensation of depth.

Continued on next page

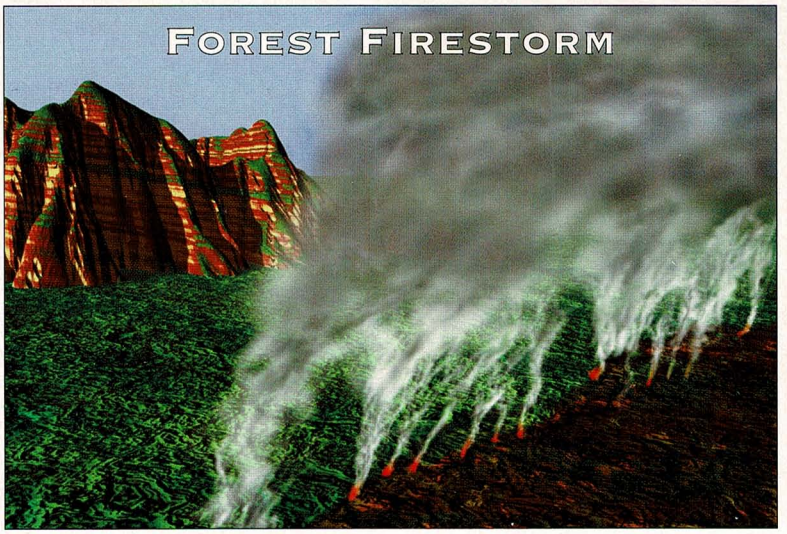
PARTICLE SYSTEMS

Real atmospheric effects are caused by light rays being blocked or scattered by fine particles in the air. With rain, mist, fog and steam this is made up of fine droplets of water, with dust it's tiny fragments of stone and with smoke it's a mix of carbon, gas, ash and water vapour. Common to them all is their high concentration and tiny particle size. This enables them to react in a fluid fashion, swirling and billowing into fantastic shapes – apparently defying gravity. A variety of computer graphic algorithms, known as Particle Systems, enable you to imitate these effects. At present few Macintosh 3D programs include such options – they're very computation intensive. Because of this, most of the time you still have to paint the effects of atmosphere rather than rendering them.



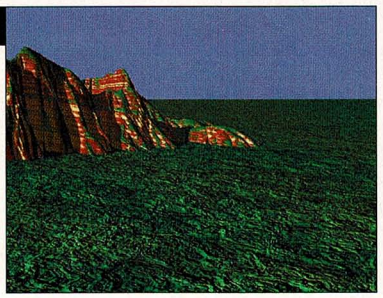
5 Like dust particles, water spray has a droplet size that you can simulate using a **Noise** effect. *Color It! 2.3.5* does not have a **Noise** filter, but if you use version 3 or *Photoshop*, you can add spray to the waves on the rocks and under the rain by selecting these areas with the **Lasso** tool and applying monochrome **Gaussian Noise**.

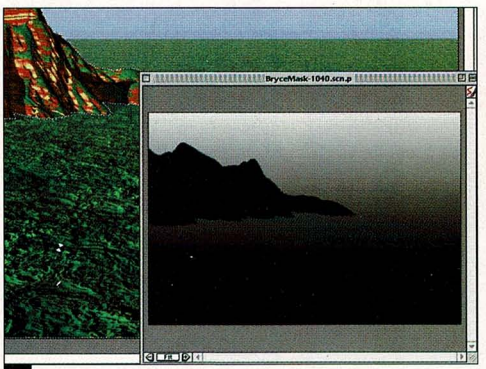
To make your burning rainforest image complete, horrible as you might find the whole idea, you'll need to add a few flames. Add these last (follow the steps below first) with a small airbrush, then smear them slightly with the **Finger** tool. Having done this you might think that the clouds seem rather undramatic. If so, add more smoke.



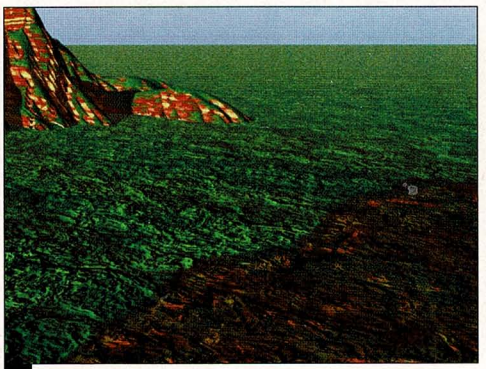
The initial image is produced using *Bryce*, this time with vegetation on the hills and a textured, bump-mapped ground plane for the rainforest. Because this has a pure blue sky and perfect distant colouring you must give it a degree of realism by adding a 'damp', jungle-style atmosphere.

1





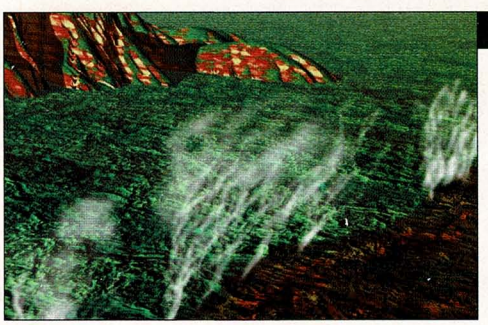
2 In *Bryce* you can render haze well, but when you only have *Color It!* you must lay on a mask and apply a semi-transparent gradient over the image. First, find **Atmosphere-Mask.pict** on the Cover CD, and open it as a mask in *Color It!* Apply a vertical gradient, from white at the top to black at the bottom, as shown above. Because black is opaque to paint and white is transparent, filling the main image with white while this mask is in operation gives a smooth haze effect.



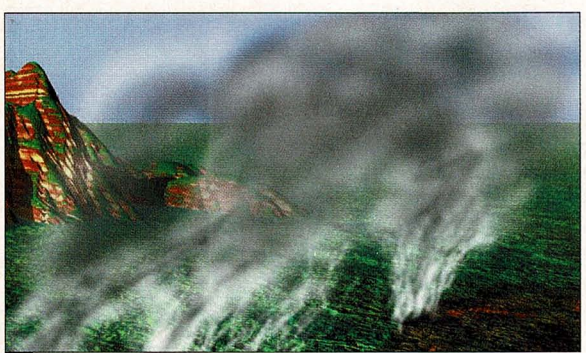
3 You can easily produce the burnt area by colouring the green area of the *Bryce* image with various shades of brown. To maintain a logical colour range, use shades from the hillside, picking your colours using the **Eye Dropper** tool. Add a darker shadow line along the edge of the remaining vegetation using the **Darken** tool.

DO IT YOURSELF

You can find a few of the pictures you'll need for this tutorial on the Cover CD, in the **Color It!** Images folder.



4 Rainforest clearance is carried out with bulldozers and the trees are piled up and burnt. This means that the smoke comes from confined geographical areas. You can paint it with a very fine (two to four pixels) brush, set to low opacity (10% to 20%), using white paint. The column of smoke is opaque, and should start off narrow at the base, becoming transparent and widening as it reaches higher. To achieve this effect, start at the base, working upwards in a wobbly line.



5 You can apply thicker grey smoke using a larger airbrush. Unlike the clouds and sandstorm, the initial smoke clouds are white – you can spray on the grey later, at the point where the various individual columns of smoke join together and thicken. Make sure that you keep the opacity low, painting over an area several times to thicken the effect – it's always easier to add more paint than to remove an excess.

WHERE?

■ We gave away *Color It! 2.3.5* on the MACFORMAT 31 Cover Disk. You can now buy version 3.0.4 for just £49.95. For more details of how to order your copy, see page 115.

■ *KPT Bryce* scored a Classic Award-winning 91% in MACFORMAT 20. It costs £115 and is also available through MACFORMAT's special Reader Offers service. See page 116 for more information.

■ *Adobe Photoshop 3* costs £737.90. For more details contact Principal on 01706 831831.

COLOR IT! UPDATES

Color It! 2.3.5 – featured on the cover of MACFORMAT 31 – has most of the tools that you require to create the effects used in this tutorial. Dust, rain clouds, and smoke have many features in common and you can create them all with a few sizes of **Airbrush**, **Lighten** and **Darken** (**Dodge** and **Burn**) tools, and a **Smudge** (**Finger**) tool. The new update of *Colour It!*, version 3.0.4, is faster and has a wider range of tools, but still does not have *Photoshop's* Noise filters. If you already have a copy of these, however, *Color It!* can run them as plug-ins. All of this adds to *Color It!'s* use as an intuitive painting tool. *KPT Bryce* is also capable of creating impressive mist, fog and cloud effects. We have not talked about these in this tutorial, instead concentrating on how to use hand-painted effects.

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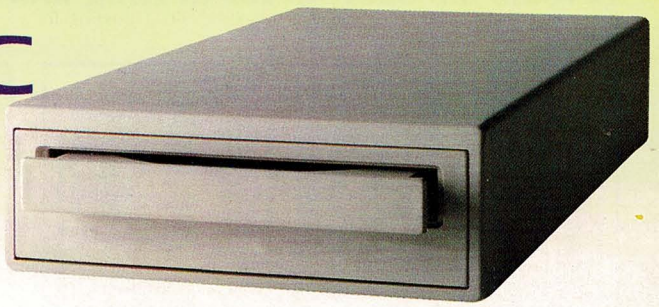

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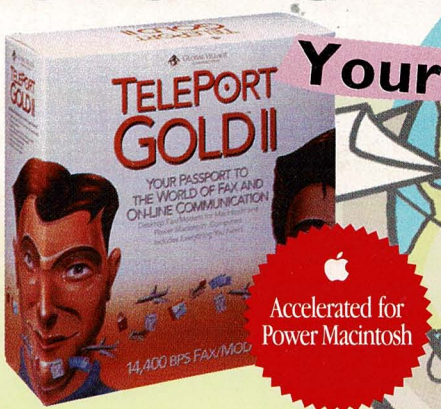
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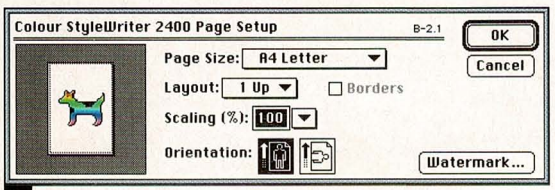
Easy forms

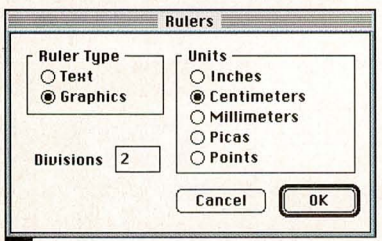
Designing and producing good-looking forms in minutes is simple when you know how. Derek Smith reveals his secrets for getting more from *ClarisWorks*.

The crucial aspect of designing a form quickly is the judicious use of the Grid feature which you can find in almost all desktop publishing and graphics packages. This tutorial shows you how to use the graphics module of *ClarisWorks*, although similar techniques are applicable to most other layout programs. Whatever program you are using it is possible to produce comparable results.

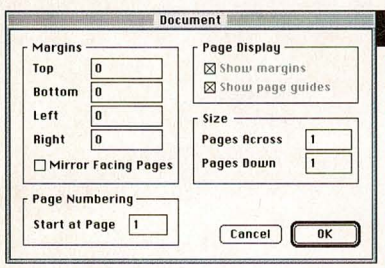
SETTING UP



1 Open a new Draw document, and make sure the page size is set to A4 by selecting **Page Setup** from the **File** menu. From the **Options** menu, make sure the grid is shown, and that **Autogrid** is on.

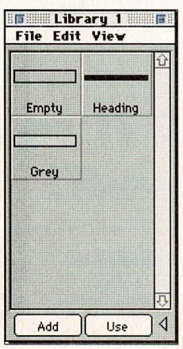


2 Select **Rulers** from the **Format** menu. The settings you enter here control the size of the grid you'll be using later. In this case, the unit of measurement is the centimetre, with a division of two. This means the grid spacing will be 5mm in size.



3 Select **Document** from the **Format** menu. Printers can usually handle margins of about 1.5cm, so you could set your margins to 1.5cm, and draw your form to the edge of the document. Better advice, however, is to set all the margins to 0, then draw 1.5cm inside the edges of the document. This is mainly because *ClarisWorks* isn't particularly good at printing lines at the very edge of a document. You'll see the other reason when we come to draw the dotted line.

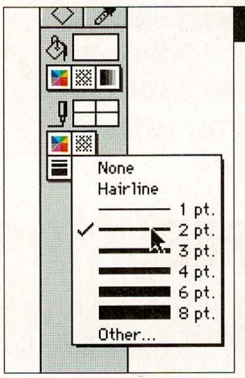
SHORTCUTS



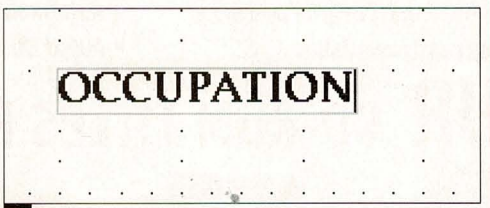
To help you draw all these boxes, you can double-click the Rectangle tool so that it remains selected. The rectangle tool will turn black when double-clicked. You can also create a library of boxes. Select **File**, **Library** and **New**. Click on a box to select it, then click the **Add** button on the **Library** palette. To use an library item, simply drag that item from the library onto your page, as here.

It may be that your forms are based on information stored in a database. If so you can mail merge some of that data onto your forms by selecting **Mail Merge** from the **File** menu.

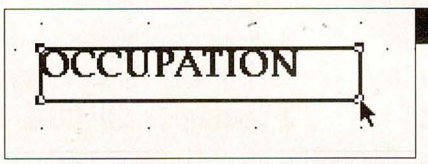
CREATING THE FIELDS



1 Before you start drawing the boxes, change your line thickness to two points, and text style to **Bold**. This changes the defaults.



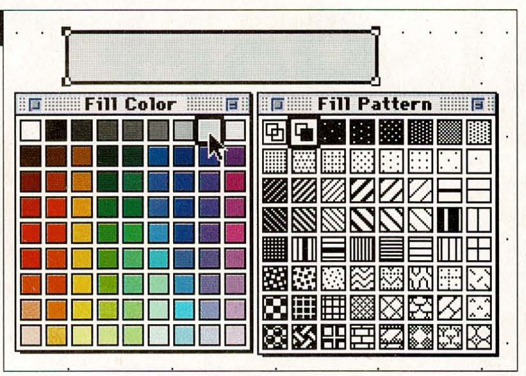
2 Next select the Text tool, click on the page, and then type in the field name, in this case 'occupation'.

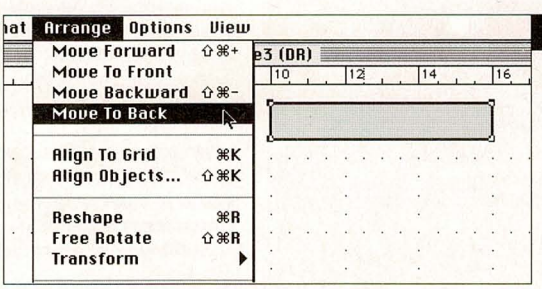


3 Select the Rectangle tool and draw a box around the field name.

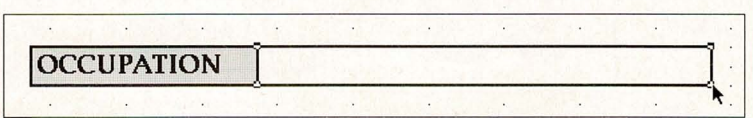
If you have a colour printer, give the box a fill colour. If you have a black and white printer, give the box a fill pattern.

4





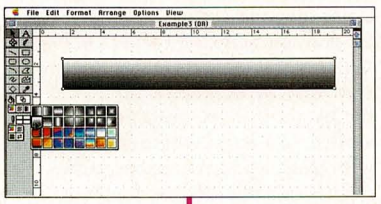
5 Choose **Move to Back** from the **Arrange** menu to put the box behind the text.



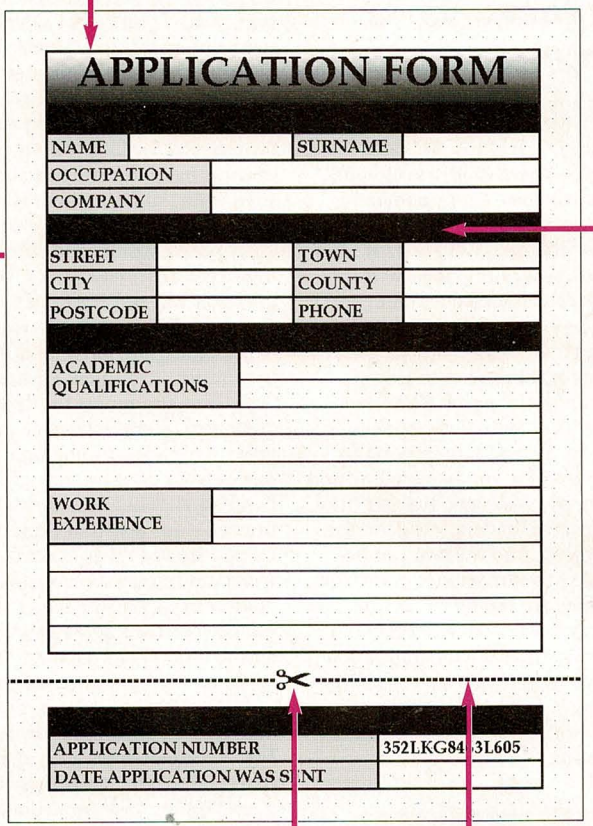
6 Draw an empty box for the recipient to write in.

To position the text more centrally, turn the Autogrid off and use the arrow keys to nudge the text box down and right. (It's best to leave this until you have all your text on screen, and move all the text boxes at once.)

TITLE

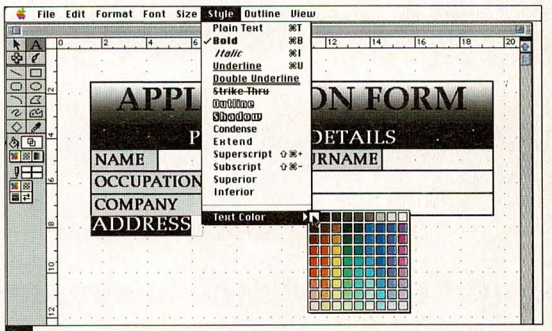


Obviously you can create any title effect you wish, but the advantage of this one is that it works just as well on both colour and black and white printers. Create a rectangle and give it one of *ClarisWorks'* very good gradient fills. Enter the text over the gradient fill. Creating a black subtitle below the main title makes for a strong effect.

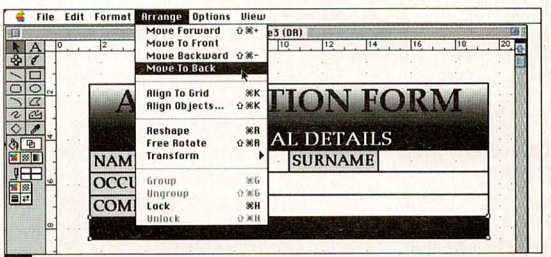


Normally, you might imagine, you'd need a full-fledged DTP package to create a stylish, functional form like this – but no! *ClarisWorks* is all it takes!

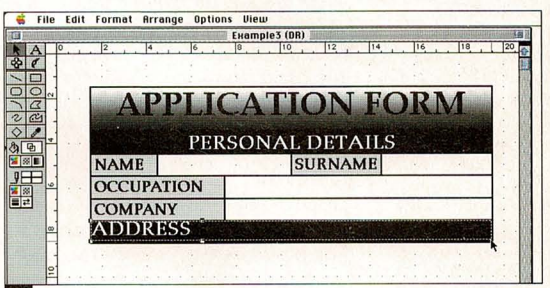
SUB-TITLES



1 These are created like the fields. Write the heading text, highlight it, then choose a text colour of white from the **Style** menu.

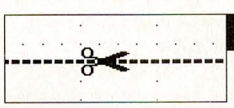


2 Draw a box around the text, fill it with black, then move it to the back using the **Move to Back** option in the **Arrange** menu.



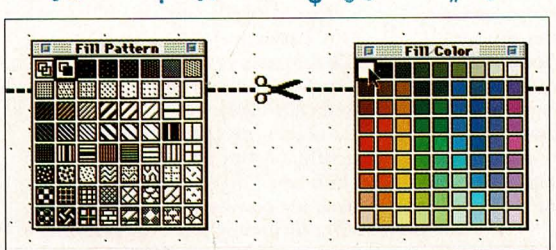
3 If you want the subtitle centred, stretch the text box the width of your form, then choose **Alignment: Centre** from the **Format** menu.

SCISSORS



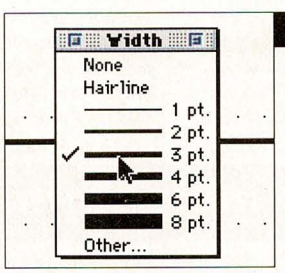
1 The scissors are ready created for you in the Zapf Dingbats font. Create a text box near the dotted line, change the font to Zapf Dingbats, and type the character you want (the key to hit is on the left below, the resulting Dingbats on the right). You may need to turn Autogrid off so that you can position the scissors directly over the line.

Key =	Dingbat	Key =	Dingbat	Key =	Dingbat	Key =	Dingbat
"	✂	!	✂	$	✂	#	✂

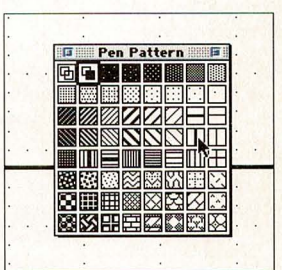


2 It looks better if you blank out the dotted line directly beneath the scissors. To do this, click on the text box containing the scissors to select it, and give it a solid fill of white.

DOTTED LINE

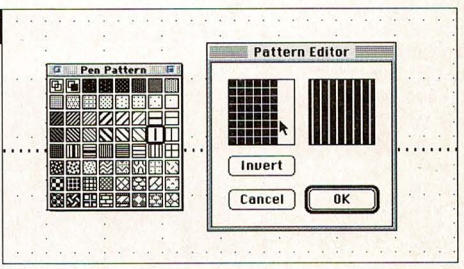


1 One the few tools missing from *ClarisWorks* is a dashed line feature. However, there is a way you can work around this. Draw a straight black line, and give it a thickness of three points. Draw it to the edges of the document to ensure that your printer will print it as close to the edges of the paper as it is able.



2 With the line selected, go to the Pen Pattern pop up menu, and tear it off.

3 Double-click one of patterns to enable you to edit it. Simply click on the black squares in the left-hand box and they will become white (and vice versa). When you are happy with your pattern (as shown in the right-hand box) click on **OK** to apply a segment of it to the line you have drawn.



Professional scriptwriting

HyperCard, reviewed in our multimedia round-up, is also a powerful building tool, as the *MACBOY Organiser* proves. Here are some of the tricks of the trade...

TOOLS OF THE TRADE

HyperCard is used by many professional C programmers during the early stages of application development – it's much easier to manipulate windows, buttons and other objects in *HyperCard* than it is in C.

Once you've created your *HyperCard* programming masterpiece, there are a few things you need to do to add the final polish. And one of the first is to make sure your application doesn't look like a *HyperCard* stack. Why? Two reasons: first, for the sake of appearances; second, to stop *HyperCard* and your Macintosh getting confused.

For a start, there are a lot – *a lot* – of very grim, poor-quality stacks out there in the shareware/freeware market. Magazine reviewers and end-users only have to glimpse a *HyperCard* icon before they switch off and go and play with something else.

This isn't because *HyperCard* can't produce decent applications – it can. It's because it's easy for beginners to fiddle around with, hence the market is swamped with 'amateur' applications. So, sadly, you might have more success if you disguise your application's origins from its potential users.

You should use *ResEdit* to give your *HyperCard* applications unique signatures; otherwise other stacks could launch using your standalones rather than *HyperCard* itself.

New and unique

You might also want to disguise your application's origins from *HyperCard* and your own Macintosh. Why? Because when you create a standalone application, it retains the *HyperCard* 'signature' and there's a real danger that your stacks may think it's their home card – if you drag one of your stacks on to a *HyperCard* standalone, the standalone will open it.

So what do you do about it? It's not enough to use a utility like *File Buddy* to modify your stack's document and creator type – you really need *ResEdit* (see the boxout). *ResEdit* is useful for all manner of things, but in this instance it lets you dip into BNDL resources, which contain the application's 'signature'. Although you can design an icon for your standalone and apply it by pasting it into the Get Info window, it only 'covers' the generic *HyperCard* icon, and the two can become separated if machines crash and Desktop files are rebuilt or corrupted.

By using *ResEdit* you can define your standalone as a new application type, preventing *HyperCard* stacks from recognising it as their creator application. You can also install an icon as a fixed resource that can't get 'lost'.

Health and efficiency

Before you start tidying up your application for distribution you need to make sure not only that it's bug-free, but that it's running as efficiently as possible. Simon Whittaker, the author of *MACBOY*, reckons that for every hour he spent writing the scripts, he spent four hours refining and optimising them. There are two reasons for doing this, and the first is speed – generally, the shorter your scripts, the faster they run – and the simpler it is for you to understand what's going on.

That's the second reason. Because *HyperCard* makes it so easy to write scripts 'on-the-fly', your first working version of a script will usually be filled with badly-chosen variable names, clumsy and often redundant loops or conditional statements, and things that happen in an illogical or inefficient order. A messy script is very difficult to understand if you come back to it later. And if you can't understand how your script works, you've little chance of fixing it if something goes wrong.

On the same subject, however, it can be worth sacrificing sheer speed for comprehensibility. If you call lots of short handlers and functions rather than trying to build them all into a single script, you'll be able to find errors much faster (and rule out routines that definitely work). Your application will run fractionally slower, but you'll find it easier to work out what's going on. Such modular programming techniques are drummed into all programmers for this reason.

As well as optimising all your code, you should spend some time optimising your application's size. *HyperCard*, bless its heart, is usually full of unused icons and other resources. Using *ResEdit* (again), take the time to weed out the ones your application doesn't use – it could make all the difference between being able to squeeze it onto a floppy or having to resort to fiddly archiving/segmenting software.

You should also take steps to eliminate free space in your standalone. *HyperCard* generates a lot of empty space, hence the **Compact Stack** menu option. One immediately obvious way is to automatically compact the stack every time it's closed. The following handler will do this:

```
on closeStack
  doMenu "compact stack"
end closeStack
```

This does slow down the process of quitting and is only necessary at

CREDIT WHERE CREDIT'S DUE

MACBOY

The *MACBOY Organiser*, programmed by Simon Whittaker, was reviewed as shareware in MACFORMAT 33. If you missed it, see page 117 for details on how to obtain your copy.

Use *HyperCard* and *ResEdit* to change the **About...** item under the Apple menu to reflect the title of your own application.

The MACBOY™ Original
ORGANISER
V 1.01
visit our website at www.macboy.com
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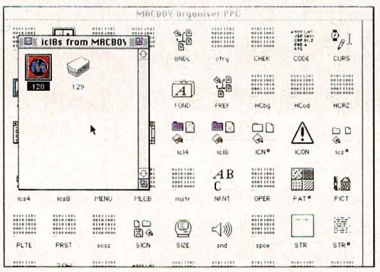
Another measure you should consider is replacing the **About HyperCard** option that appears on the Apple menu. Using HyperTalk, you can change this to read **About stack x...** , or whatever you want. (Although you can change what the Apple menu item says, the message it sends will still be **About HyperCard...** – but you can trap this with a HyperTalk handler.)

You can display your own message using *HyperTalk*, or use *ResEdit* to replace the About HyperCard window with one of your own (the window is a PICT resource). Make sure, though, that somewhere in the application you acknowledge that it was created with *HyperCard* – it's a legal requirement.

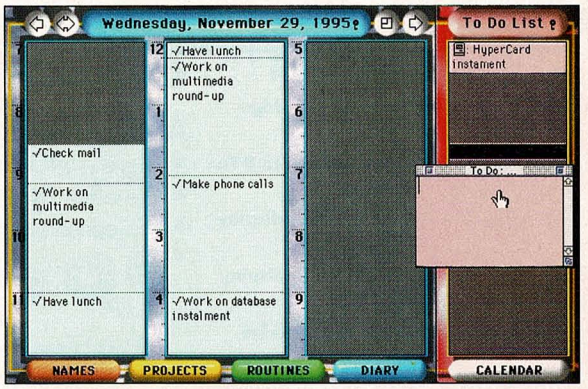
Another potential worry – the security of your script – is not usually a problem. You can't access the scripts in standalones without some clever script-swapping routines from within another stack, or – conceivably – unless you change the standalone's file type to 'text' and open it with a word processor or text editor.

Provided you credit *HyperCard* somewhere in your application, you can also use these two programs to replace *HyperCard's* 'splash' screen with one of your own.

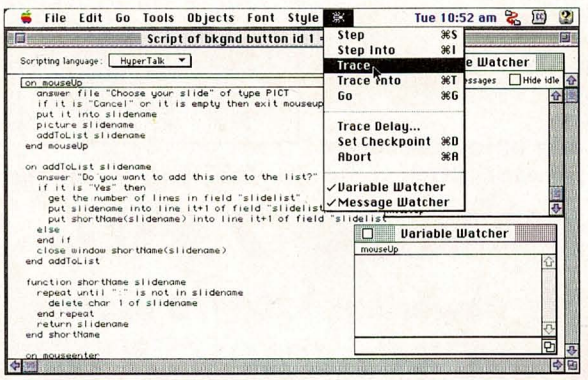


When you create a standalone *HyperCard* application, you need to use *ResEdit* to give it a unique application signature and icon if you don't want other stacks to confuse it with *HyperCard*.

Both of these applications were created with *HyperCard*. Hard to believe, isn't it? *HyperCard* makes it easy for amateurs to create applications... which isn't necessarily a good thing.



HyperTalk comes with a powerful debugger which can display windows showing messages and variables currently in use, and which enables you to set checkpoints and execute scripts in slow motion or one step at a time. It's invaluable for catching bugs, and bugs are inevitable once you start trying to optimise your scripts.



infrequent intervals. The solution used by the *MACBOY Organiser* is to check the amount of space in the stack using HyperTalk's FreeSpace function; when the free space reaches one-third of the stack size, the **Compact Stack** command is used automatically.

```
on closeStack
if freesize of this stack > size of this ¬
stack/3.5 then
  answer "The diary needs compacting. ¬
  Do  it now?" with "No" or "Yes"
  if it is "yes" then
    stop using stack (the short name of me)
    answer "Create a backup copy first?" ¬
    with "No" or "Yes"
    if it is "yes" then domenu "save a copy..."
    domenu "compact stack"
  end if
end if
pass closeStack
end closeStack
```

This handler also checks to see if you want to back up your organiser while you're at it.

Quick and dirty

HyperCard often presents a dilemma: there are elegant solutions and there are practical solutions... and the practical ones are usually the quickest.

For example, if you want a line of text in a field to highlight when you click on it before carrying out some action, you'll initially expect to use a script that identifies the line clicked on and then uses the **Select** command. But in fields with many lines, this is very slow. *HyperCard* identifies the line you clicked on very quickly but, for some reason, the selection process gets progressively slower, the more text there is in the field.

The answer? You cheat, using a transparent button. You write a script for the field such that when you click on it, it moves this transparent button underneath the mouse pointer and highlights it. You do need to use some slightly fiddly mathematical calculations in your script to make sure that the button lines up properly with the line of text, but once you've done that you have a solution that's faster than the 'proper' one. This works best with non-scrolling fields, where lines of text don't wrap. If you wanted to use it on a scrolling field, the maths gets trickier – you would have to take into account the amount the field had been scrolled (using the **Scroll** function).

Here's a handler that controls such a transparent button (it goes in the card script rather than the field's): create a field called **selection box**, fill it with lines of text and lock it. Then create a transparent card button called **hiliter**. Type **set hilite of last cd btn to true** into the message box and hit return. The handler does the rest, loading the selected line into the global variable SELECTEDLINE and unhiliting the field if you click anywhere else.

```
on mouseDown
  global SELECTEDLINE
  if the short name of the target is ¬
  "selection box" then
    get rect of the target
    put item 2 of it + ((word 2 of the ¬
    clickLine – 1) * textheight of the ¬
    target) into topLoc
    set rect of cd btn "hiliter" to item 1 of ¬
    it,topLoc,item 3 of it,topLoc + ¬
    textheight of the target
    show cd btn "hiliter"
    do "put" && the clickLine && "into ¬
    SELECTEDLINE"
  else
    put empty into SELECTEDLINE
    hide cd btn "hiliter"
  end if
end mouseDown
```

The *MACBOY Organiser* demonstrates another programming trick, mimicking a standard dialogue gadget. The report generator enables you to change the start and end dates for the period you want a report on. You change these by clicking on the date currently displayed. When you do this, a double-headed arrow appears – click on the top arrow to increase the number, the lower arrow to decrease it.

The instant reaction to a challenge like this might be to create three buttons – the frame for the arrows, the top arrow and the bottom arrow – then lock the screen while you 'show' all three (so they all appear at once). *MACBOY* uses a more elegant solution, though. The arrows and their frame are a single button, with a single icon. The button has a script which can tell whether you clicked on its upper half (the up arrow) or its lower half (the down arrow). This indicates whether to increase or decrease the number in the date field and involves some maths and *HyperTalk's* date functions, to make sure that the new date is 'legal'.

The script for detecting whether the arrow button was clicked at the top or bottom is simple:

```
on mouseDown – sits inside the button
  set hilite of me to true
  if (top of me + bottom of me)/2 > the ¬
  clickV
    then goUp
  else goDown
    set hilite of me to false
  endif
end mouseDown
```

The handler that does the date checking is complex. Suffice to say youcan check the result with the line:

```
If myDate is a date then...
```

Next time we'll finish our look at professional programming techniques and tricks, by finding out how to add to HyperTalk's already formidable functions and capabilities with external commands (XCMDs). **MF**

KEEP IT GOING

In the scripts on these pages, the symbol ¬ means that you should continue to the next line – the line of script just wouldn't fit in our narrow columns.

RESEDIT

If you're a brave and fearless soul and fancy hacking your Mac's resources, you'll find *ResEdit* on this issue's Cover CD. If you didn't get the CD edition, try searching the Internet for *ResEdit* and download the latest version (free) from an Apple developers' site. Always work on a backup, though – *ResEdit* is very powerful and has few safeguards.

NOT SO DIRTY

The tips suggested under the 'Quick and dirty' heading aren't confined to *HyperCard*. All professional programmers in any language will use a fast solution in preference to an 'elegant' one – you just won't hear about it very often.

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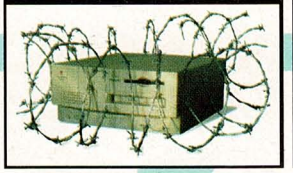

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Track your fortune

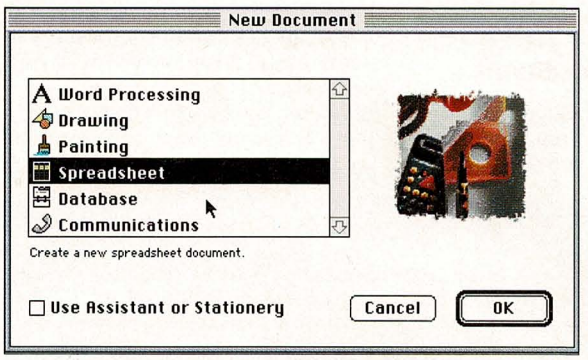
It's a common fallacy that if you want to handle calculations you need a spreadsheet. Rod Lawton exposes the calculating power of databases.

Databases and spreadsheets are commonly put across as being two separate and distinct things: one is for storing information about many items in a regular format, the other is for carrying out interrelated mathematical calculations. But despite this apparent dissimilarity, databases and spreadsheets actually have a great deal in common.

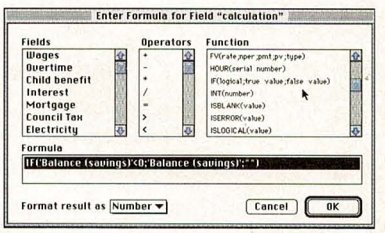
Back in MACFORMAT 35 we showed you how to use formulae in database calculation fields, and how these formulae are similar to those in a spreadsheet. The mathematical terms are the same and even the specialist functions available are similar. Indeed, if you were to compare the functions available in the database and spreadsheet modules of *ClarisWorks*, you'd find there's no difference.

There is a difference in the way calculations are inserted, though. Whereas you type a spreadsheet formula into a cell, you type database formulae into special calculation fields. These can act on the contents of any other field on the record in the same way that spreadsheet formulae act on other cells in the spreadsheet. Calculation fields can add numbers, convert dates from one format to another, even carry out complex statistical and trigonometric functions.

The only practical difference between spreadsheets and databases for carrying out calculations is that spreadsheets are set up specifically to do that – it's much easier to create a complex structure of calculations, and modify it while you work. If you want to carry out complex interrelated calculations within your database records, you have to define fields and develop a layout from scratch – you don't have a pre-made grid to work with. But at the end of it, the only limitations are the physical area of your records (spreadsheets can be the size of football pitches) and your own patience. There's little you can do with a spreadsheet that you can't do within a database record.



STOP! Before you launch that spreadsheet, just think. Wouldn't you be better off with a database equipped with calculation fields? Think of all the reports and analyses you could carry out! Life may never be the same again...



Database calculation functions include conditional statements like this one. Here, we've created a field that checks to see if our monthly accounts are in the red. If they are, it displays the amount; if they're not, it's left empty.

Spreadsheet in a database

But why use a database for calculations? Spreadsheets are easier to use, there's no doubt about that. But let's return to a perennial favourite of this series – keeping invoice records. Sure, you could create a standard invoice form using a spreadsheet, but each invoice would be confined to a single file. If you wanted to produce reports of unpaid invoices, client history lists and the like, it would involve a lot of tedious, manual cross-referencing and collating. In fact, it would involve all the jobs that databases are designed for. It's easy enough to build spreadsheet-style calculations into a database, but much harder to build database functions into a spreadsheet. Although *Excel*, for example, has many database tools, they can be clunky and inefficient – and you can't do useful things like creating alternative layouts.

Spreadsheets are best for open-ended calculations where you're designing the structure as you go, and where you'll want to make changes and try 'what if?' scenarios. Databases are better where the calculations are reasonably straightforward and compact, but where you will often want to collate information or create reports.

They are also better when you want to submit information calculated in the same way, but with different

MORE...

Previous installments of this series, which show you how to construct and get the best performance out of your database, are available in issues 26, 27, 30, 33, 34 and 35 of MACFORMAT. These include information management, database creation, how to make your personal information manager more visually appealing and how to speed up the process of searching for and retrieving information. For more details on how to complete your collection of database information, turn to page 117.

Continued on next page

SPREADSHEETS, DATABASES – THE WHOLE STORY

Spreadsheets comprise a grid of cells, each with its own specific address – for example, cell B4 is the cell in the fourth row of the 'B' column. Any cell can contain a formula that uses the contents and addresses of other cells. For example, cell C3 could contain the formula '=B4*2'.

Database calculations work in a similar way. Imagine your record's layout is like a spreadsheet document. Calculation fields can contain formulae that work on the contents of other fields (which have to be in number format). The only difference is that fields are referred to by name in the formulae, and that you don't have a spreadsheet-style grid of cells to begin with. In this example, the 'VAT' field would contain a formula running along the lines of:

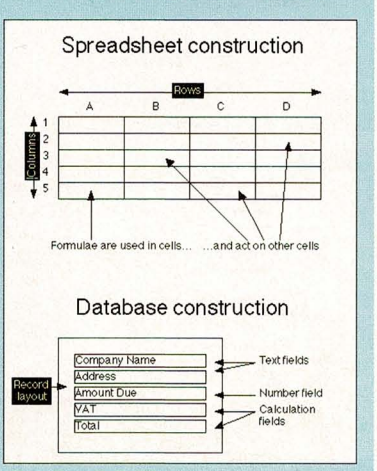
"=field"Amount Due"*0.175"

and the Total field would contain:

"=field"Amount Due"+field"VAT"".

The advantage of setting up spreadsheet-style calculations in a database is that you can carry out calculations on many records, using 'summary' fields. For example, you could calculate the total amount of money your customers currently owe you. Standard search procedures help you isolate just the records you're interested in, and your summary calculation fields can then work solely on these.

You can imagine that your database records work in the same way as the cells in a spreadsheet.



NOW YOU SEE IT...

Don't forget you can create fields that you don't use in your layouts – although they are 'hidden', they still 'work' and can be used in calculations. You could have one layout for input that displays all the individual amounts you need to enter, and another for day-to-day use that simply shows the results.

FAST FORMATTING

If you need to apply the same number formatting to a whole bunch of fields, shift-click to select them all (or drag a box around them with the pointer tool) and then double-click to bring up the formatting dialogue – the changes you then make will be applied to all the fields that you have selected.

figures each time, to different people. Another example might be a building contractor's system submitting estimates. The various costs could be typed into a standard spreadsheet document which you then sent to the customer, but at the end of the day you'd end up with a folder full of 'estimate' files. Use a database, though, and all the estimates are stored in a single file. What's more, with the right fields built in, it's easy to create a report of, for example, all clients worth chasing up – those where the work is worth over £10,000, maybe.

There are conditions...

In fact, there are conditional statements. If you trawl through the functions in *ClarisWorks*, you'll find the IF statement, for instance. You could use this in the example Home Accounts database (see the box below) if you wanted the system to give you a special warning to tell you if you'd overspent in one particular month.

The IF statement has three parts, separated by semicolons. In English, these are 'Check if this is true; if it is do this; if it isn't do this.' In this case you first check if you spent more than you earned. If you did, you want to put the amount into the field; if you didn't you want to leave the field blank. This will display a negative sum in months when you're in the red, but nothing at all if you succeed in staying in the black.

You can combine functions too, so that a field could check each month to see IF you had to pay your electricity bill AND gas, water and telephone bills. Here's the formula:

IF(AND('Electricity'>0;'Telephone'>0;'Gas'>0;'Water'>0);"Bad month for bills!";"")

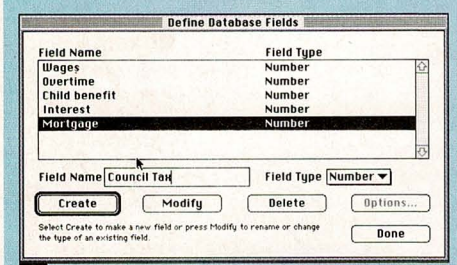
If there are values in all of those fields, this field will display 'Bad month for bills!', otherwise it will remain empty.

These are just two of the many formulae available in *ClarisWorks'* database module and its bigger brother, *FileMaker Pro*. For a full list of functions and what they do, check the online help provided with the software.

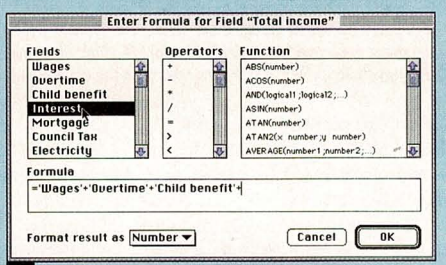
Next installment we'll look at mail-merging, and how you can use your database to simplify those standard letters that you need to send out, whether they are promotional fliers or late-payment reminders. **MF**

CREATING A HOME ACCOUNTS DATABASE

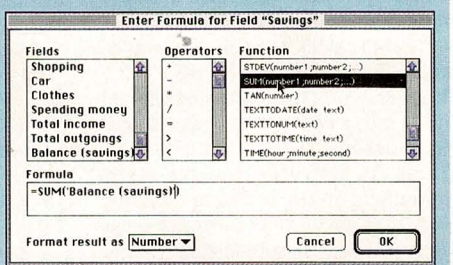
If you keep your home accounts in a database rather than a spreadsheet, you can not only carry out all the totalling you did before, you can analyse the results too – for example, you could isolate all those months where your total spending exceeded a certain limit, or you could try to establish a link between your motoring costs and the time of year. Setting up a database like this in *ClarisWorks* is easy:



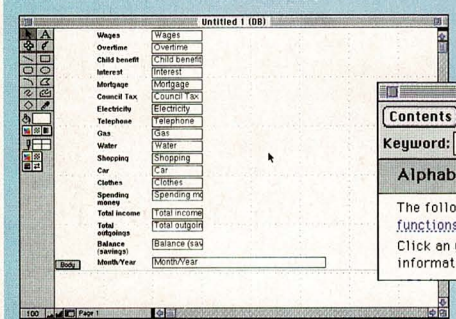
1 The first job is to define all of your database fields. You'll need two lots of figures: one for income, one for outgoings. All of these need to be defined as number fields so that you can carry out calculations on them.



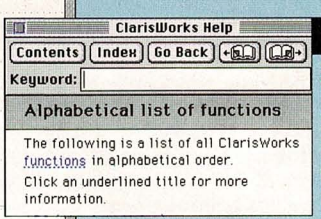
2 Now you want to total up your income and outgoings. For this you create calculation fields – you're then prompted to fill in the formula. Select the operators you need from the middle window and the fields you want to add together from the list on the left. You can use the same method to produce a 'balance' field that subtracts your total outgoings from your total income.



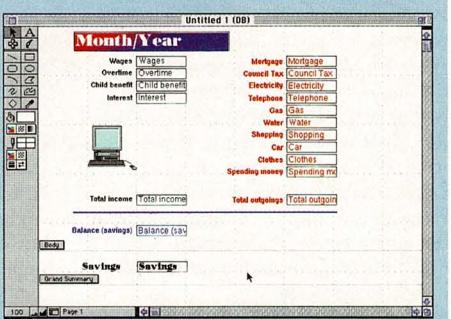
3 You can also create a 'summary' field that gives you a running total of your savings. You need to copy the SUM formula from the formula list in the right window, then just paste in the field you want the formula to total.



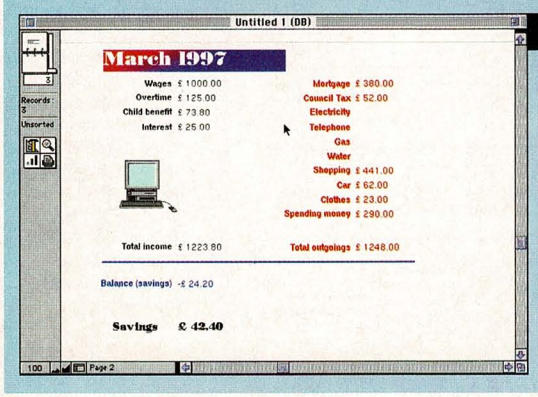
4 Once you've added a field to show the month, this is your default layout. It's neither inspiring, nor particularly easy to figure out. But before you do something about that...



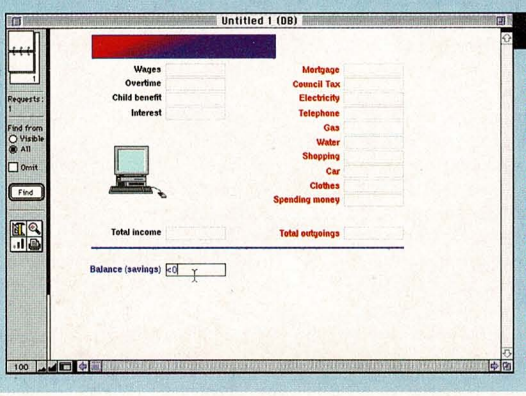
5 ...you need to select all the number fields and change their number format to 'currency', with two levels of precision (assuming you want to include pence – set this to 0 if you want to round up/down to pounds).



6 Now you can do something about the layout, by adding a bit of colour and clip art, and arranging income and outgoings into separate columns, with the totals beneath. You also need to insert a Grand Summary layout section to include your running total of savings.



7 And here's what your home accounts database looks like in use. The savings field (in black, at the bottom) calculates how much money you've accumulated (if any), and only appears once, at the end of all the records.



8 Now you can both store your home accounts data and do some useful research. For example, simply by searching for records with less than 0 in the Balance (savings) field, you can isolate all the months when you spent more than you earned.

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MAC ANSWERS

Psst, want to buy a cheap watch? One careful owner, low mileage, etc, etc. Not interested? Oh well, how about some free Mac advice? Yes? Then read on...

Welcome once again to MacAnswers, a delicious slice of advice from the very cream of Mac troubleshooting gurus. Well, maybe not cream, more sort of semi-skimmed milk. Or possibly cottage cheese with a twist of lemon and a sprinkling of mixed herbs.

Anyway, if you've got a problem (and haven't we all?) fill in the form on page 80 and send it in, or e-mail us at **macformat.futurenet.co.uk** making sure you put MacAnswers in the subject title. Sorry, but we can't reply personally, or answer technical questions over the phone, because we're all busy getting cookery lessons this month and we can't seem to get our bernaise sauce to quite the right consistency.

The Mac that never sleeps

PERFORMA REMOTE CONTROL

Q I have a Performa 5200 with the built-in TV (which I don't actually make use of) and remote control. As I use the Performa to send and receive faxes, I leave it on all the time, in the same room as my hi-fi and TV. A problem arises every time I use the remote control for either the TV or hi-fi – the Mac comes out of sleep mode and turns itself on. Apart from sticking a piece of paper over the sensor (which looks ugly), is there any way of stopping this annoying problem?

Jason Jackson
via fax

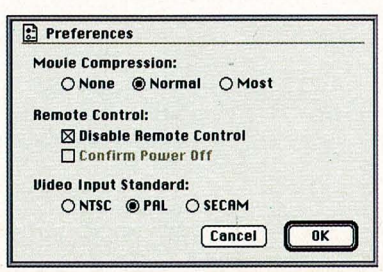
A You should have got an *Apple Video Player* application with your Performa (it would have been installed in the Apple Extras folder on your hard disk). Launch the program and select **Preferences...** from the **Setup** menu. In here is a check box option to disable the remote control. Check this and quit the program. Your Mac should now slumber peacefully in the corner, while you watch your TV and happily flick between channels.

Double vision

MONITORS

Q I have a Performa 5200CD and find the built-in monitor a bit small, so I've bought another one, along with a Rasterex Ranger graphics card. In the user guide, it states that there is a port for connecting an external monitor to an external video connector ('optional'), which I do not have. Is this the only way to connect a second monitor to my Mac?

Terry Eldred
Pitsford, Northampton



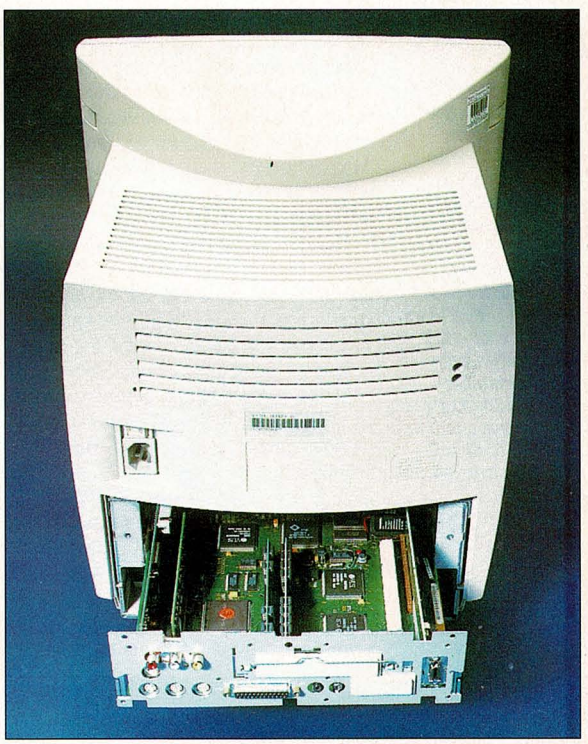
You can use the **Preferences** box in *Apple Video Player* to disable the remote control sensor on Performas with a TV tuner card installed.

A The Performa 5200 does not have a monitor port on its back, presumably because Apple reckoned that you would never need to connect a second monitor. However, all is not lost. You can connect a second monitor via the 5200's LC-PDS expansion slot. The slot is similar to the expansion slot in most Quadras and Power-Macs (but not the newest Power-Macs); the only real difference is that the LC-PDS slot can only take cards seven inches in length, while the full-blown PDS slot will accept both seven and twelve inch cards.

First of all, you need to get your hands on a suitable graphics card to plug into the expansion slot. Unfortunately, the one you already have isn't going to work in your Mac because it's designed for use with a PC. Your letter suggests that you bought this second-hand, so it sounds like a refund is out of the question. Your only recourse is to try to sell the card on.

You *can* use the monitor you've bought, but only with a suitable graphics card such as the Colourfusion 24-bit graphics board from Xceed, which will cost you a hefty £441 plus £9 carriage. Contact Mygate Computing on 0800 132591. You'll also need an adaptor to connect your VGA (Video Graphics Array) or SuperVGA monitor to the card. You can get adaptors from various manufacturers, but Hitachi (0181 849 2000) does a good universal SVGA adaptor for £14. We strongly recommend that you get an engineer or an Apple authorised repair centre to fit the card for you – the inside of your Mac is exceptionally delicate and doesn't like inquisitive, inexperienced fingers poking around.

If this all sounds somewhat expensive, then your only other option is to try and sell your Performa 5200 and buy a Mac without a built-in monitor. The Performa 6200 doesn't have the built-in monitor, but is otherwise identical to your 5200, so this would be a good bet – you can pick one up for around £1,000 or so.



To connect a second monitor to the Performa 5200 you have to stuff a graphics card in the LC-PDS slot around the back (that's the white slot on the right). See 'Double vision'.

A real RAM Doubler

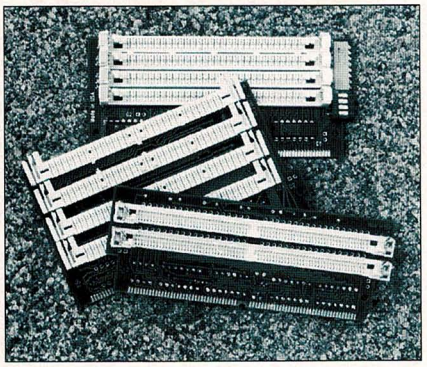
MEMORY

Q I have a Performa 630 with 8Mb of RAM. Do I have 4Mb on the motherboard and 4Mb in a SIMM slot? Can I use 70ns and 80ns SIMMs together, or is this likely to cause crashes? Can I use SIMM doublers in my Mac? If so, can I use the

Continued on next page

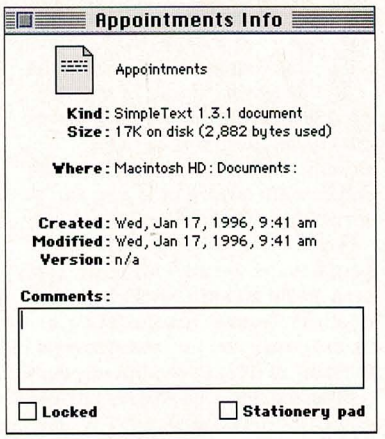
HIDE AND SEEK

If you are working in an application with an open window and want to go to the Finder, you don't have to drag the mouse to the **Application** menu (on the far right of your Mac's menu bar) to hide the application. Simply hold down the **[option]** key and click on the Desktop. The application and all its windows will be hidden from view.



Using special adaptors (these ones are from SimmSaver in the US), you can fit more than one SIMM into each SIMM slot inside your Mac. See 'A real RAM Doubler'.

Internet widow



This file takes up 17K of disk space, but it's only actually using just under 3K. What's going on? See 'Greedy files'.

System 8

Copland, or System 8, or even MacOS 1.0 as Apple likes to call it, is the next generation Mac Operating System. Due out late this year, Copland has been completely rewritten from the ground up, and will change the way you work forever. A key feature it offers is true multitasking, where your Mac can literally do two or more things at once – so it can copy files in the background while it renders a 3D picture and you type a letter to the bank. It will also offer a customisable interface.

4Mb SIMM and an 8Mb SIMM together in a SIMM doubler?
G Morgan
Sawston, Cambridge

A The Performa 630 has one SIMM (Single Inline Memory Module) slot and will take up to 36Mb of RAM (that's one 32Mb SIMM plus one 4Mb SIMM on the motherboard). Your Performa has 4Mb soldered to the motherboard and a 4Mb SIMM occupying the SIMM slot. SIMM doublers, made by MicroMac, are plug-in adaptors that enable you to plug two SIMMs into your existing SIMM socket.

In older Macs with more than one SIMM socket, you had to use the same size of SIMMs in each. Here they don't need to be the same size, but they do have to be the same speed. You need to use 72-pin 80ns or faster fast-paged SIMMS in your Mac – don't try fitting anything else. If you fit a SIMM doubler, you can plug both your 4Mb SIMM and a new 8Mb SIMM into this, giving you a total of 16Mb of RAM. This means that you don't need to junk a perfectly good 4Mb SIMM in favour of something bigger. But if you use a SIMM doubler, be warned: doing so will invalidate the guarantee on your Mac. SIMM doublers are £94 each. For more details contact Mac-Rapide on 0181 381 4810.

Greedy files

DISK SPACE

Q *Why is it that a file that's only 1K on floppy disk suddenly becomes as big as 33K when I load it onto my 7500's hard disk? Even the smallest documents take up a minimum of 33K on the hard disk – which is especially annoying when you are designing a Web page with a limit of 500K.*
Rainer Cadera
via e-mail

A Your Mac is behaving perfectly normally. The phenomenon you've discovered is to do with the way your Mac allocates space to files. To cut a long story short, when a disk is formatted, your Mac splits it up into small sections called allocation blocks. Because the Mac can only handle a finite number of these blocks, it follows that on larger disks the allocation block size grows. On your 7500, the allocation block size is 33K and this is the minimum file size, since your Mac can't give half a block to a file.

However, although your Mac has allocated 33K of disk space to a file, that doesn't mean that the file is actually using all that space. In fact, as you work on the file, you will fill up that 33K, and when it pushes over that limit your Mac will assign another 33K block to it. This makes the allocated size 66K, even if the file is only really using 34K.

If you then copy this file to a floppy disk, the allocation size will shrink to within 1K of the actual space the file is using. This is because a floppy is split up into allocation blocks of 512 bytes, or half a kilobyte. Your Mac doesn't present disk information in units smaller than 1K, so a 512 byte or smaller file shows up as being 1K. The Get Info window can tell you the file's exact size if you really need to know.

The Mac from Hell

PRINTING

Q *1. When I try to print in colour on my Hewlett-Packard DeskWriter 600 from* ClarisWorks, QuarkXPress *and* PageMaker, *my Performa 6200 crashes. I can't interrupt or force quit, and I have to restart. What's wrong?*
2. In ClarisWorks, *the Font menu is all messed up. You have to select the font above the font you want to get the right one. I tried rebuilding the Desktop but this didn't work. What should I do?*

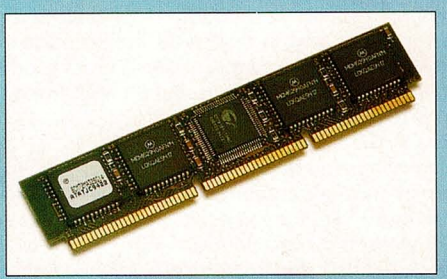
CACHE IN YOUR CHIPS

Over the last couple of issues we've had stacks of enquiries about cache cards for PowerMacs. What are they? Do you need one? What size should you get? So here goes.

All PowerMacs are based on the PowerPC series of microprocessors, which have their own built-in RAM cache. A RAM cache is a small piece of very fast memory which stores frequently used data, read from the PowerMac's main memory. The cache is directly linked to the processor, so getting information from it is much faster than accessing it from ordinary RAM. Fitting a Level Two cache card expands this RAM cache and speeds up your Mac by between 10 and 20%, depending on the model of Mac and the size of the cache.

The first PowerMacs (6100/60, 7100/66, and 8100/80) didn't come with a cache card preinstalled, but the second wave (6100/66, 7100/80, 8100/100, and 8100/110) came with a 256K card. Then, for some reason, Apple changed its mind again, and out of the new PCI PowerMacs, the only ones with a cache card fitted as standard are the 8500 and 9500. If you don't know what a cache card is, then you probably don't have one.

If you have a PowerMac, then fitting a cache card is a good scheme. It will boost your Mac's performance for comparatively little outlay. Level Two cache cards come in three flavours: 256K, 512K, and 1Mb. The size you fit depends on what you use your Mac for. All applications, even games, will run faster with a cache card fitted – the larger the card, the faster the speed increase. The question is: how much you are prepared to spend for the increased speed? Most people will find the 256K or 512K cache cards more than adequate, but if you're into heavy-duty image retouching, desktop video, or other processor-intensive stuff, then a 1Mb cache card is worth the extra cash – no pun intended.



The humble PowerMac cache card: if you don't have one, then get one. Your Mac'll run up to 20% faster.

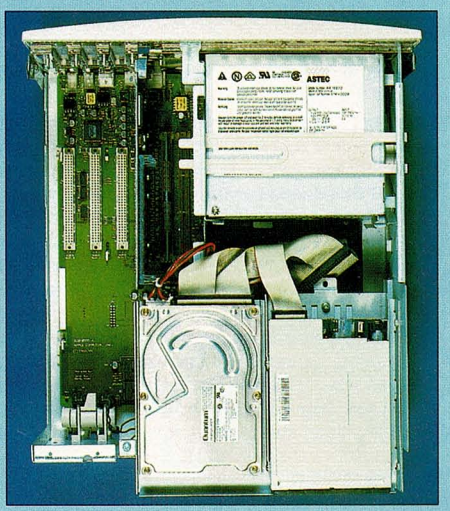
Because of the volatile nature of the memory market and competition between dealers, Level Two cache prices vary almost daily. You should be able to pick up a 256K cache card for around £150, a 512K cache for £250, and a 1Mb cache for something in the region of £460. Bear in mind that the new PCI PowerMacs (7200, 7500, 8500, and 9500) use different cards, and these tend to cost between 10% and 20% more.

FEWER COLOURS – THE DEFINITIVE ANSWER

Back in MACFORMAT 34, we answered a question from Haje-Jan Kamps in Norway. He wanted to know how to get his PowerMac 7100/66 to display less than 256 colours so that he could play *Populous 2*, a 16-colour-only game. Our suggestion was that he should try reinstalling his Monitors Control Panel. Since then, we've had loads of letters along the lines of 'I thought PowerMacs were 256 colours only' and 'I can't get 16 colours on my PowerMac'. There's obviously a lot of confusion out there, so here is the definitive guide to colour on a PowerMac. Possibly.

All Macs, except the new PCI PowerMacs, can display black and white. Most can also display 4, 16, or 256 colours, and for the last couple of years all new Macs have been able to display thousands of colours on screen as standard. But this only applies if you're using a 680 x 480 monitor connected to the HDI-45 (High Density Interface) port on the back of your PowerMac. If you connect a larger monitor via a video card in the PDS slot inside a PowerMac, such as the one supplied with the 7100 (but not the 7100DL) then the three basic colour configurations (black and white, four colours, and 16 colours) are not given as options. Apple says that this is a feature, not a bug – presumably it thinks that if you're willing to go to the expense of buying a PowerMac and a large monitor, then you aren't likely to be playing games on it. We'll reserve judgement on that, particularly in the light of the recent hardware-intensive games we've seen. The answer is to connect your monitor to the HDI monitor port on the back of the Mac, and not the graphics card. To do this, you'll need the adaptor that came with your PowerMac. If you play these games a lot, then it might be worth investing in a second monitor to connect to the HDI port permanently.

If you own a PCI PowerMac and want to play your old black and white and 16-colour games, then life is going to be difficult, because the minimum number of colours is 256. We haven't come across any software – shareware or otherwise – that will make these Macs display fewer colours. Anyone know of any? All you shareware authors out there – how about writing some?



The 7100 came with a graphics card preinstalled in the PDS slot (it's on the right of the three NuBus slots on the top right). The 7100 also has a HDI-45 monitor port on the back panel. Which one do you connect your monitor to?

3. Is it possible to get hold of a 3D UNIX interface like the one running on the Quadra 700s in Jurassic Park *for the Mac? If so, where, how much does it cost, and what setup do you need?*

Stephen Naylor
Bradford, West Yorkshire

A1. This is unlikely to be a PostScript problem, since *ClarisWorks* isn't a PostScript program. In whatever application you are using, first make sure that you select **Colour/Greyscale** from the **Print** pop-up menu. You'll find this under **Options** in the **Print** dialogue box.

You might also try turning off Background Printing in the Chooser. It's possible that your Mac is crashing because there's something wrong with PrintMonitor, the application that handles printing in the background. If you can print without problems when this is switched off, then you should reinstall the printing software from your original System disks. If this doesn't work, try disabling *RAM Doubler* by holding down the **[esc]** key on startup. *RAM Doubler* has been known to cause the odd minor problem, so try this.

You also might try giving each of your applications more memory in the **Get Info** box, under the **File** menu in the Finder.

The problem could also be due to the driver you're using with your printer. If you're using the LaserWriter 8 Extension that comes with your Mac, try getting a new version of the printer description file for your particular printer. You should be able to get this from Hewlett-Packard (call 01429 865511), or from the dealer who sold you the printer. This goes in the Printer Descriptions folder inside the Preferences folder, which is in the System Folder, and tells your Mac how to talk to the printer and what features are available. Make sure you're using the correct file for your printer. If you are using a custom driver that came with your printer, try getting hold of an updated version from Hewlett-Packard.

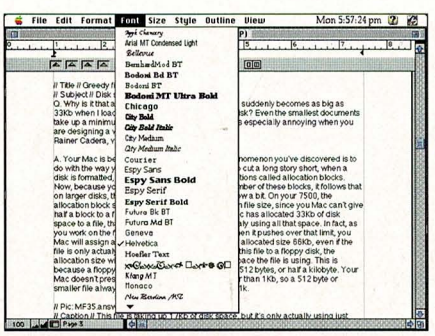
2. This could be tied in with your printing problem. There are two possibilities here, the first being that *ClarisWorks* is damaged, in which case you should reinstall it from your original disks. The second is a possible font identity clash. Each font installed on your Mac has a identity number that is used to get the right font every time. It's possible that you may have two or more fonts installed with the same identity number. Try dragging all of your fonts from the Fonts folder (inside the System Folder) to an empty folder on the Desktop, except for the main Apple fonts – Times, Courier, Monaco, Palatino, Geneva, Helvetica, Chicago, and New York. Then launch *ClarisWorks* and see if your printing problem persists.

If not, then you'll need to go through your fonts and look for duplicates. If you can't find any duplicated fonts, try putting them back one by one until *ClarisWorks* starts playing up again. Either throw away any suspect fonts, or keep them in a separate folder until you can get hold of replacements. If you bought commercial fonts, then you should reinstall these from the original disks. If these are damaged, you should be able to get your disks replaced by the font company that produced them. If they are shareware fonts, you will need to get in touch with the author and ask for replacements. If all else fails, try reinstalling your System software from the CD that came with your Performa.

DISK CACHE

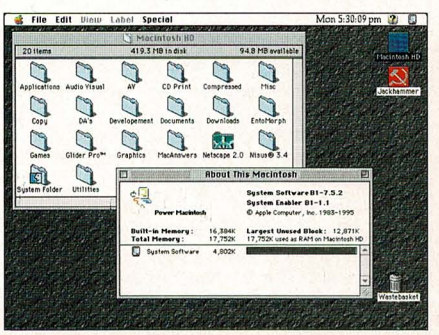
You can speed up your Mac by increasing its disk cache in the Memory Control Panel. The disk cache stores frequently read data from your hard disk in a portion of RAM. Next time your Mac needs this data, it doesn't have to access the hard disk – a process that slows it down. Increasing the disk cache means you have less memory available for applications to run in, but it improves your Mac's performance. For most applications, try setting your disk cache to somewhere between 128K and 1Mb.

Continued on next page



ClarisWorks uses a WYSIWYG (What You See Is What You Get) Font menu. This enables you to see fonts before you use them in a document. See 'The Mac from Hell'.

'Computer porn's the least of my worries. I hear there's a Bob Monkhouse joke page in there.'



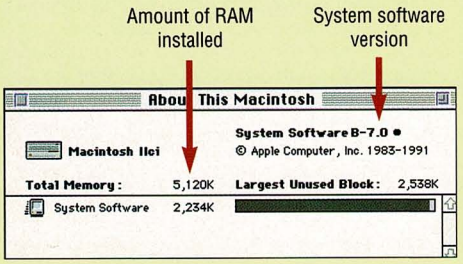
Okay, so it's not quite the 3D UNIX interface in *Jurassic Park*, but *Aaron* gives your Mac 3D folders and windows just like Copland will. See 'The Mac from Hell.'

The do-it-yourself problem solving guide...

One of the most common causes of problems on the Mac are Extensions or Control Panels clashing in your System Folder. It's easy to check if this is the case. Restart your Mac and hold down **[shift]**. Release the key when you get the message, 'Welcome to Macintosh. Extensions off.' If everything works, then the problem lies in your System Folder. The only way to work out which item is the culprit is by trial and error. Remove a few Extensions and/or Control Panels, then restart your Mac, without holding **[shift]** down. Keep on doing this until the problem no longer occurs and you've found the offending software.

If this doesn't work, try rebuilding your Desktop. Start up your Mac holding down **[command]** and **[option]**. You'll get a message asking if you want to rebuild the Desktop. Click **[OK]**, wait for it to finish and see if this solves your problem.

If you're still stuck, use the form below to write to us. We'll need to know a few facts about your Mac, so when you're in the Finder, select **About This Macintosh** from the **Apple** Menu. The picture (left) shows what we need to know.



POSTSCRIPT

PostScript is Adobe's page description language. It's used for printing smooth-looking fonts and graphics. To print PostScript fonts properly, you need a PostScript printer. To create PostScript graphics, you will need a PostScript drawing program, such as *FreeHand* or *Illustrator*.

3. UNIX is a type of operating system found on older high-end workstations, such as those that the Internet is based on. The infamous '3D UNIX' scene in *Jurassic Park* was in fact a mock-up. Apple loaned Mr Spielberg all the hardware to make the control room in *Jurassic Park* look as high-tech as possible. There is no such thing as a 3D UNIX operating system – yet.

If you really want to decorate your Mac with pieces of 3D interface, then try *Aaron*. This was on MACFORMAT 33's Cover CD (see page 117 if you missed it) and is an Extension that gives your Mac's Desktop a Copland-type interface. Copland is the next generation Mac Operating System, being developed by Apple, and is due for release some time next year. To install *Aaron*, simply drag its icon over the closed System Folder and your Mac will offer to put it in the right place.

Micro-slouch

SOFTWARE

Q *I'm using Microsoft* Word *and* Excel *on my Quadra 700. Both are excellent programs, but they take up lots of room on my hard drive, use up buckets of memory, and take forever to open files. Is there a way to get them to open documents quicker without buying a PowerMac? Why do they take up so much space?*

Tak Sum Ho
Swindon, Wilts

A This has to do with the way that Microsoft writes software for the Mac. Built into every Mac is a ROM (Read Only Memory) chip, which holds the part of the Operating System known as the Toolbox. The Toolbox is a collection of routines that are made available to programmers. These routines handle common events on your Mac, like drawing windows, opening files, playing sounds, and so on.

The idea behind this was originally to encourage programmers to write software for the Mac, and to get them to use a uniform interface. By using these routines, programmers can cut down the amount of work they have to do, reduce the amount of space their program takes up on disk, and get the application to run in less memory. Because the ROM is part of your Mac's memory, all these routines are available to programmers at any time, but for some obscure reason known only to itself, Microsoft doesn't like to use them. Where possible, it writes all its own routines. This means that Microsoft applications tend to use slightly more memory and more hard disk space than most applications.

For starters, make sure you are using *Word 6.01*. Microsoft rewrote part of *Word 6.0* to make it run faster after numerous complaints that it was slower than version 5. You should have been sent this upgrade automatically – if you weren't, contact Microsoft on 01734 271000. The only other thing you can do to get *Word* and *Excel* to run faster is to upgrade your Mac – so don't miss next issue! We'll be covering upgrades and accelerators in depth – what they are, where to get them and how much they cost. **MF**

If you send in a question for the MACFORMAT experts to solve, please fill in and include this form (or a copy of it). And please make sure that you include all the relevant details – version numbers of software and so on – so that we have the best chance of helping you. Send your form and question to: MacAnswers, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW or fax it to us on 01225 446019.

Name .....

Address .....

.....

.....

.....

Your Mac
(For example, Performa 200, IIfx, PowerBook 145):

.....

System version
(see **About This Macintosh** screenshot above): .....

Amount of RAM
(see **About This Macintosh** screenshot above): .....

Are you using Virtual Memory? ..... **YES/NO**
(This is accessed from the Memory Control Panel under System 7)

Do you have 32-bit addressing turned on? ..... **YES/NO**
(This is accessed from the Memory Control Panel under System 7)

Details of any relevant hardware which could help us to answer your question:

.....

.....

Now, use this space to describe your problem or question. Please include as much relevant information as possible, and continue on a separate sheet if necessary.

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9500/132 16/2000 CD & ATI VIDEO CARD	
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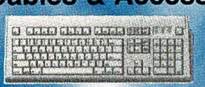

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On the write tracks

CD-ROM made the multimedia revolution possible, and the new generation of CD writers make creating your own CDs affordable. Lindsay Bruce explains all.

Okay, so you've got your multimedia masterpiece together and you want to share it with the world. But hang on, it's taking up 200Mb on your hard disk – you can't upload all that to the Internet! And worse still, you need that hard disk space for your next extravaganza.

The ideal solution is to put it on CD-ROM. But how do you do that? You've probably got an audio CD player at home, and possibly a CD-ROM drive attached to your Mac. But neither of these can write data to a CD. And sorry, but a bit of tin foil and a knitting needle aren't going to get you far either. You need a CD writer.

A CD writer is a type of drive. You connect it to your Mac via the SCSI (Small Computer Systems Interface) port on the back of your Mac like any other drive. Using one of these, appropriate software (usually supplied), and a gold master disc, you can start cutting your own CD-ROMs.

Why use a CD writer?

There are a number of advantages to putting your files onto compact disc, even if they have nothing to do with multimedia. First of all, it provides a secure backup of your data. Compact discs, if taken care of properly, will last a lifetime – certainly a lot longer than your Mac, which has a life expectancy of around ten years. Second, compact discs are the ultimate in portable storage because many people with a Mac these days have a CD-ROM drive, or access to one. Third, once you've got the drive, storage is very cheap –

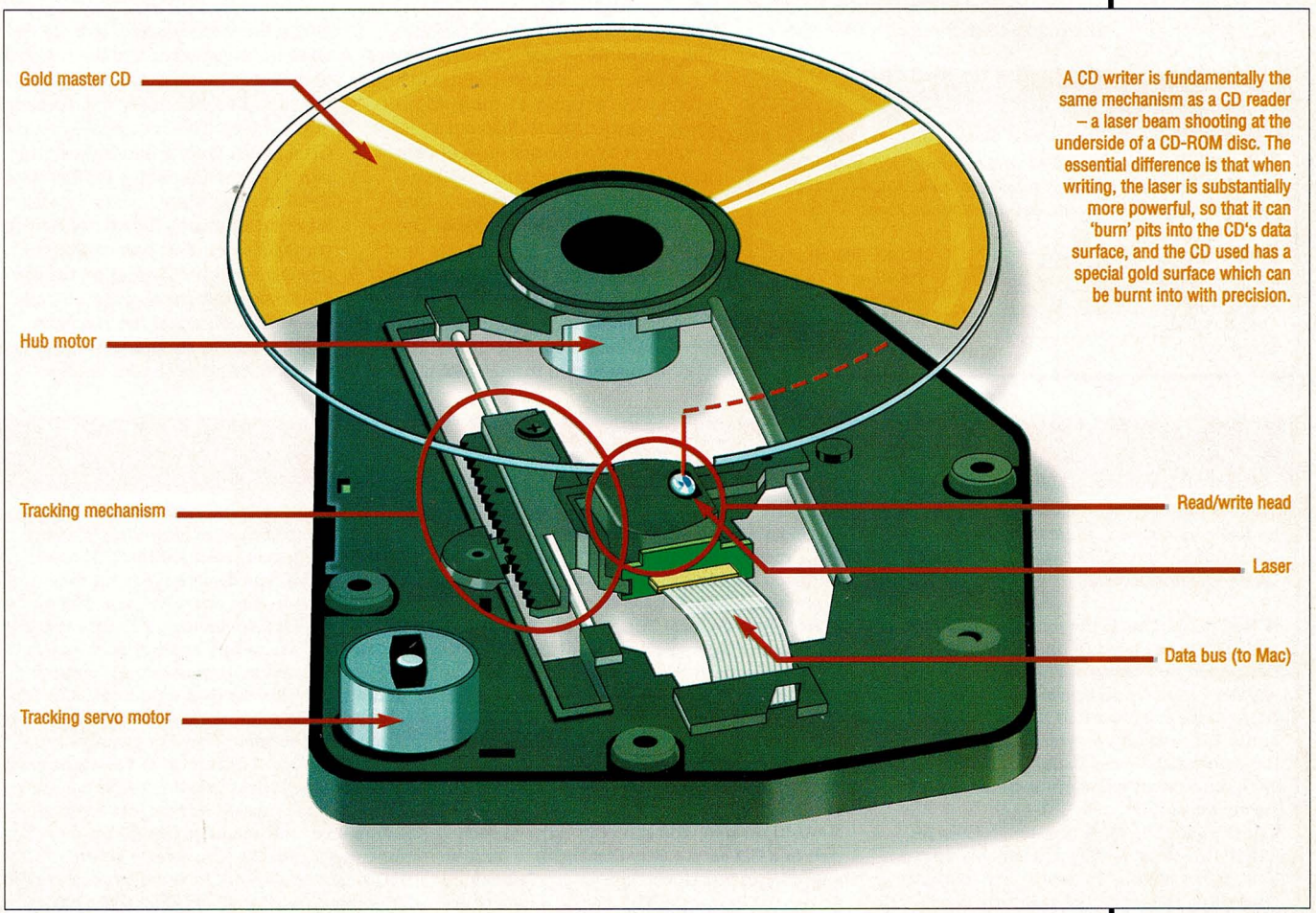
Continued on next page

How do CD writers work?

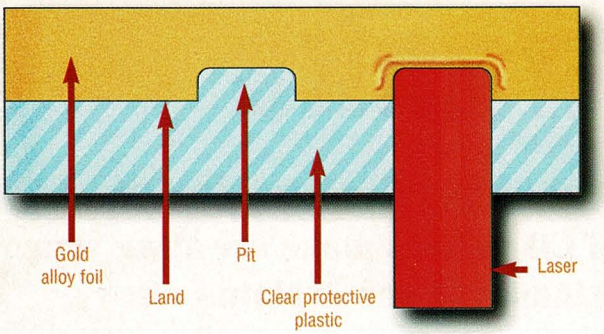
A compact disc is basically a thin sheet of metal foil sandwiched between two plastic layers. One side of the foil is covered in tiny pits arranged in tracks – much the same as the track on a record. Each pit, or absence of a pit (a land), denotes a single bit of data.

In a CD player, a laser follows the tracks and reflects off the surface of the CD and back to a receiver, which converts the pulses of light into electrical signals. Each time the laser hits a pit, the reflected beam is interrupted and the receiver registers a '0'; each time it hits a land, it registers a '1'. The result is an electrical pattern of zeros and ones – in other words, the familiar format of digital data.

A CD writer works in reverse. Information (data) from your Mac is sent as a series of electrical pulses to the laser inside the drive. The laser then burns a small pit into the surface of a special blank CD to represent each '0' of data.



A CD writer is fundamentally the same mechanism as a CD reader – a laser beam shooting at the underside of a CD-ROM disc. The essential difference is that when writing, the laser is substantially more powerful, so that it can 'burn' pits into the CD's data surface, and the CD used has a special gold surface which can be burnt into with precision.



In a CD writer, the drive's laser beam cuts 'pits' into the gold foil of the CD disc. The pattern of pits and lands corresponds to the 0s and 1s of digital data. A CD reader uses a weaker laser which bounces off the data-bearing surface, back to a receiver which interprets the pattern of pits and lands.

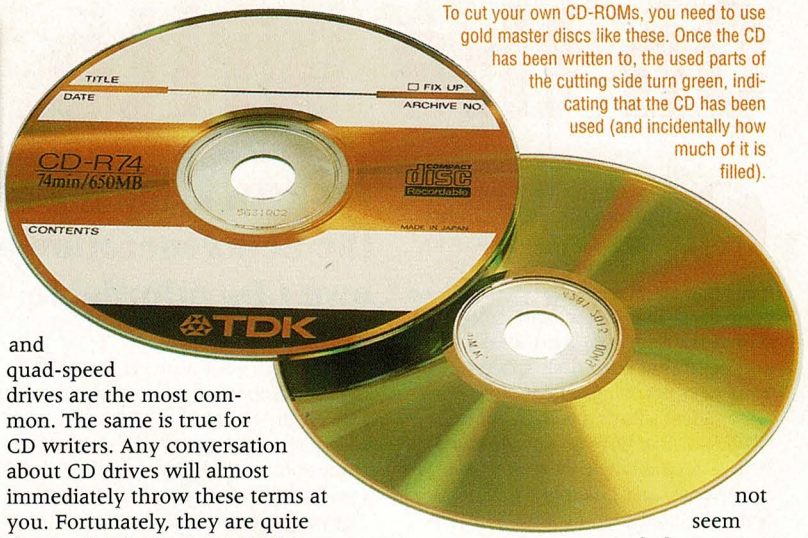
around £7 for over 650Mb at a time. This makes CD-ROM one of the cheapest storage options available.

What you really need to know

Compact discs are WORMs. That means 'Write Once, Read Many'. Data can only be written to each part of a CD once – it can't be changed or deleted afterwards. But the data can be read from the CD time and time again. This means that CDs are particularly handy for distributing software and backing up important data.

However, CDs are slow. Typically, a CD-ROM drive can only deliver between 150 and 600Kb per second. Compare this with the average Mac internal hard disk at 5Mb per second (that's as fast as the Mac's SCSI bus will handle at the moment).

The speed at which a CD-ROM drive can pull data off a CD and transfer it to your Mac depends on how fast the mechanism works. Double-speed and quad-speed drives are the most common. The same is true for CD writers. Any conversation about CD drives will almost immediately throw these terms at you. Fortunately, they are quite simple. Originally, most CD drives could only transfer data at around 150Kb per second. Then, with ever advancing technology, transfers of 300Kb a second were developed. These were dubbed double-speed drives, and this is what most people now have. There are now triple, quad, and even six-speed drives available.



To cut your own CD-ROMs, you need to use gold master discs like these. Once the CD has been written to, the used parts of the cutting side turn green, indicating that the CD has been used (and incidentally how much of it is filled).

For CD players, the general rule is the faster the better, but this may not always hold true for CD writers. Most CD writers are double-speed mechanisms and will write a whole CD in just over 30 minutes. There are also quad-speed drives that can master a CD in just over 15 minutes (and cost twice as much). This is still quite a long time to wait, so you'll probably find that writing CDs is best done over lunchtime, or even overnight – in which case, another 15 minutes isn't going to make much difference.

There is also the question of data reliability. A CD written at 300Kb a second is usually more reliable than one written at twice the speed. The reason is that as the disc rotates at higher speeds, the margin for error is bigger. Most quad-speed drives can be forced to write at double or single-speed, making errors less likely. A cost of £7 for each gold master disc may not seem much, but you won't want to waste a dozen of 'em.

You may find that some CD writers are badged as quad-speed, but they may not be able to write CDs at this speed. Some can; others can *read* CDs at 600Kb at second but can't *write* CDs at this rate. On the face of it, this is a good idea, since it reduces the cost of the drive and you can still read CDs very fast. The thing to watch out for is an unscrupulous dealer claiming something is a quad-speed CD writer when it isn't. It's a double-speed writer and quad-speed *player.*

OEMs

Given the wide range of storage devices on the market and the number of different brands, you may be surprised to hear that very few companies make drives. This is especially true of CD writers. Only a handful of companies – Yamaha, Sony, Philips, and Ricoh among them – actually make drive mechanisms capable of writing compact discs. This means that although there are increasing number of CD writers out there, most of them use almost identical mechanisms.

So, if you're shopping around, often the only thing to choose between

DRIVE FASTER?

You will often see CD-ROM drives advertised as double-speed or quad-speed. This relates to how fast the drive can read data off a CD and send it to your Mac.

Single-speed	150Kb per second
Double-speed	300Kb per second
Triple-speed	450Kb per second
Quad-speed	600Kb per second
Six-speed	900Kb per second

WHICH FORMAT DO YOU USE?

The CD has been with us for a few years now, and as you'd expect, there are plenty of different formats. Here are the ones you're most likely to come across.

- Red Book. This is the most common format, and it's the one used for music CDs. It was developed by Sony and Philips, and is the standard used by all music CDs. Every CD-ROM drive supports Red Book, but to get an audio CD to mount on your Mac, you'll need the Audio CD Access Extension (supplied with the System software) installed in your Extensions folder.
- ISO 9660. The most common format for CD-ROM – that is, CDs that hold computer data. It can be read by nearly any computer (including the Mac), but is mostly used for PCs. ISO 9660 doesn't support the 31 character filenames found on the Mac, it uses the same method as DOS – eight characters followed by a full stop and a three character extension. No spaces are allowed.
- HFS (Hierarchical File System). This is the format the Mac uses on all its discs. HFS CDs can only be used on the Mac. Unless you need to be able to access your data from a PC, HFS is the format you will use most often.
- High Sierra. This format was an early standard that was modified and then renamed by the International Standards Organisation, hence ISO 9660.
- Multi session. You can only write to each part of a CD once – after that the data can't be altered. But that doesn't mean you have to fill all the CD in one go. You can do it over several hours, days, weeks, even months. This is known as multi session mastering. If your software supports multi session CD mastering (most do), you don't have to fill the 650Mb at once. You can write, say, 100Mb one day, and 25Mb another. But once the CD is full you have to buy another gold master.
- Hybrid formats. It's possible to combine audio and computer data on a single CD. It's also possible to have two different CD-ROM formats on the same disc. For example, you could have both HFS and ISO 9660 'sessions' on one disc. Hybrid CDs are becoming more common in the music industry as artists put interactive multimedia programs on the disc for computer users. The reverse is true of CD-ROM games – it's not unusual to get an audio soundtrack on the same CD as some games.

WHICH WRITER IS RIGHT FOR YOU?

Drive	Software	CDs	Speed	Price	Contact
D2 Double-speed	Gear	1	2x	£881	D2 0171 833 0009
D2 Quad speed	Gear	1	4x	£1,526	D2 0171 833 0009
JVC XR-S201	Archiver	1	2x	£1,640	JVC 0181 896 6000
JVC RomMaker	RomMaker	1	2x	£2,697	JVC 0181 896 6000
MicroNet CD Plus	TOAST CD Pro	1	2x	£1,056	MicroNet 01926 470460
MicroNet CD Pro	TOAST CD Pro	1	4x	£1,879	MicroNet 01926 470460
Mirror 2x	TOAST CD Pro	10	2x	£1,174	Mirror 0121 212 2779
Mirror 4x	TOAST CD Pro	10	2x	£2,231	Mirror 0121 212 2779
Philips CDD2010	TOAST CD Pro	2	2x/4x	£1,291	Philips (CD Revolution) 01932 562000
Pinnacle RCD 1000	TOAST CD Pro	1	2x	£998	Pinnacle 01256 782 566
Pinnacle RCD 5040*	TOAST CD Pro	1	2x/4x	TBA	Pinnacle 01256 782 566
Ricoh	CD Print	1	2x	£998	Ricoh (Tekdata) 01782 577 677
Sony Spressa	Corel CD	1	2x	£1,146	Sony 0181 760 0500
Yamaha CDE102	TOAST CD Pro	2	2x	£1,291	Yamaha (CD Revolution) 01932 562000
Yamaha CDE100 mk2	TOAST CD Pro	2	4x	£1,761	Yamaha (CD Revolution) 01932 562000

Software: mastering software bundled with the drive
CDs: how many blank master discs are included with the drive
Speed: speed of writing/reading (both the same if only one figure is given)

All the drives here are supplied with a SCSI cable and terminator.
*The Pinnacle RCD 5040 is due out any time and will replace the RCD 1000, so look out for bargain prices.

them is the software and the degree of support you get from the company that boxed the drive. MicroNet, which makes its own mechanisms, supplies all its drives with lifetime technical support and free lifetime upgrades for *TOAST CD Pro*, the premier CD mastering software. While this sort of philosophy is becoming more common among retailers of Mac products, some won't even supply you with a cable to connect the drive to your Mac.

The message, then, is to make absolutely sure you know what you are buying. Shop around for good deals and make sure that everything you need to get started cutting your own CD-ROMs is supplied with the drive.

Types of CD-writers

Because of the mechanics of a CD writer, data has to be written to the disc in an uninterrupted stream. The reason for this is simple: because the CD is totally blank to start with and each sector can only be written once, the CD writer can't write a record of where data is stored on the disc and then go back and change it later. This means that if the flow of data to the writer is interrupted, the CD writer won't be able to find the point on the disc where it stopped writing.

It's for this reason that all early CD writers came with built-in AV hard drives. Ordinary hard disks – like the one in your Mac – suffer from thermal expansion. The disk platters heat up and expand, so the data tracks are in the wrong place in relation to the read/write heads. The solution is to 'rest' (or recalibrate) the drive every few minutes, and you can hear your Mac do this now and again. Unfortunately, this interrupts the flow of data for a few seconds, and in a CD writer, you can't let this happen.

An AV (Audio Visual) hard drive uses slightly different technology and doesn't need to be recalibrated, so it is ideal for mastering CDs. But AV drives aren't cheap, making CD writers with built-in AV drives costly. Today, it's common for the CD writer to have a section of buffer RAM – memory that stores data before it's written to the CD. Your Mac can transfer data along a SCSI cable many times faster than it can be written to the CD, so it periodically refreshes the RAM buffer with the next segment of data to be written. This means your Mac is free to do other things, such as recalibrate the hard disk the data is being read from.

Getting the right discs

CD writers don't use ordinary compact discs. You have to use a blank CD, often called a gold master. This is constructed the same way as any CD, but uses a gold alloy so that the CD writer's laser can burn pits into the surface of the metal foil. The process of cutting a gold master, not surprisingly, is called mastering. For commercial CD duplication, the gold master is used to make a glass master, which in turn is used to press thousands of CDs. Most CD players can read gold master discs, but not glass masters.

When you're buying gold master CDs, remember that you can only use them once. Some cheaper brands sometimes have flaws which can cause trouble when you're cutting the disc.

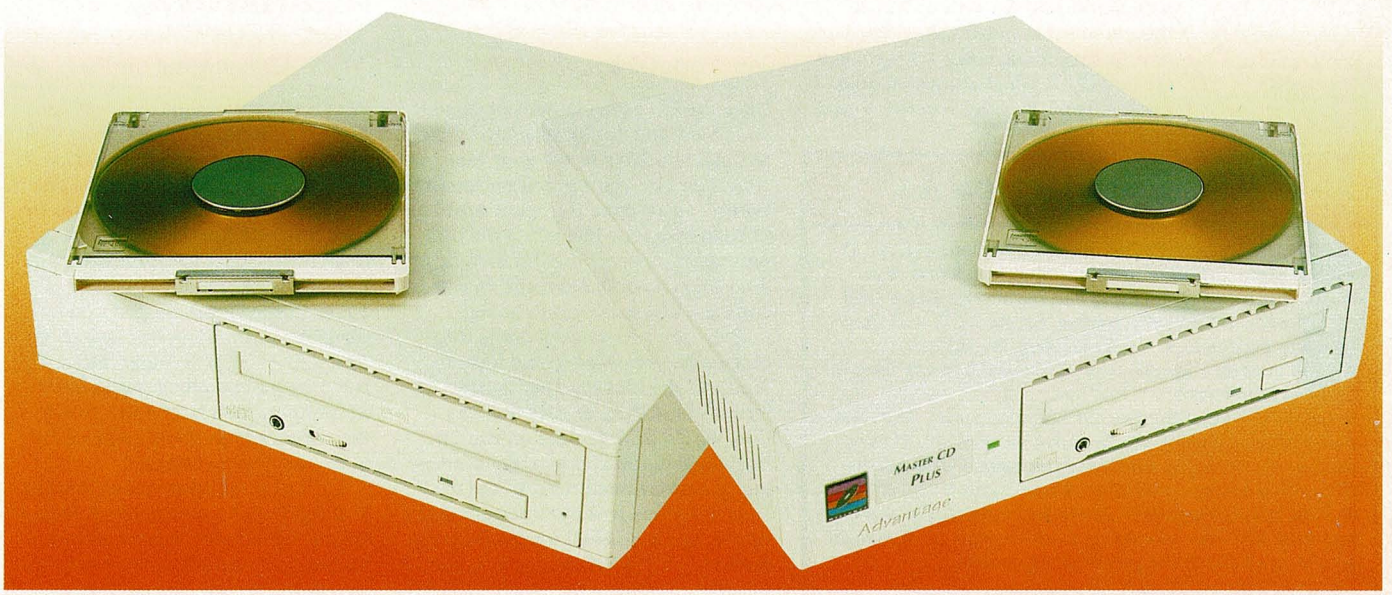
Continued on next page

PIT OR LAND?

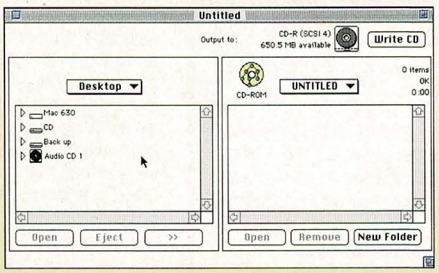
On a compact disc, a pit represents a 0, and the lack of a pit (a land) represents a 1. Each forms one bit of information. The average CD player has to read between 2.5 and 5 million of these every second, yet CD-ROM is still a comparatively slow storage medium.

THAT'S THE PITS!

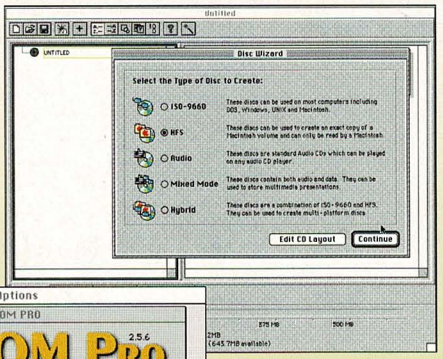
There are around 5.5 thousand million pits and lands on a 650Mb CD-ROM. (That's 650 x 1,024 x 1,024 x 8 = 5,452,595,200. Give or take a few thousand.) It takes the average double-speed CD-ROM drive just 35 minutes to read every single one of 'em.



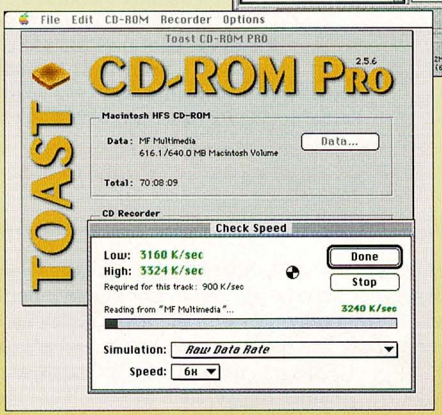
AUTHORING PACKAGES PUT TO THE TEST



Corel CD Creator's Wizard helps you through your disc preparation, while *TOAST* will check your hard disk to make sure it's up to the job.



CD Print uses a drag and drop approach for selecting your data.



Our tests suggest that most CD writers are fairly equal in terms of performance. So the deciding factor when buying a writer could well be its bundled software. The four packages we put to the test are: *TOAST Pro 2.5.6, Corel CD-creator 1.0, Ricoh CD print 1.1.1* and *JVC RomMaker 2.01.*

All four support the range of formats for Mac and PC discs as well as audio formats.

TOAST is the most popular mastering package. Its beauty is its very simple interface, which prompts you for all the information needed to produce your CD. You don't have to be a technical expert to be able to set up and press your first CD. *TOAST* has options to check aliases, test the data rate of your hard drive and run in simulation mode so you can make sure everything works before you cut the gold master. *TOAST* also has helpful features, such as reminding you to empty the Wastebasket before you press the CD, and offering you the choice of multi-session or single-session so you can't forget to select the option you need. One limitation is the lack of a facility to copy single files – it's the whole CD or nothing. This shortcoming aside, *TOAST* is powerful and offers a simple way to master your own CDs.

Corel CD Creator is well designed, with easy navigation between the various areas you need to configure. When you first launch *CD Creator* you are given the chance to check your hardware to make sure it is up to the job. Once that's done, you can set things up for writing the disc. *CD Creator* gives you the option of working with *CD Wizard.* This takes you through a series of screens that ask you simple questions to configure everything. This is a very helpful feature which makes things as easy as possible. If you don't like the *Wizard* approach you can, of course, work on your own to set up the software before cutting the disc. The entire interface is well polished and intuitive. But its major problem is the drives it supports – or rather, doesn't. We couldn't get the software to recognise a Ricoh drive in our tests. This is surprising given the limited number of drive manufacturers on the market. Once this is sorted out, *Corel Creator's* simple approach should made it a serious challenger in the CD mastering market.

JVC has its own software, *RomMaker,* specifically written for its drives. *RomMaker* is not as intuitive as some of the more graphic-based packages, but it does offer a wide range of customisation options. You can write single files or copy complete volumes, which can be in mixed formats. This option may appeal to you if you need to create CDs that can run on both Macs and PCs. There is also an option to make an image file of your data to see how it all runs before the gold master is made, though we found it sometimes had trouble 'resolving' aliases reliably. *RomMaker* isn't the friendliest of packages, but if you prefer using menus rather than a graphic interface, it may suit you. It's due for a major overhaul, and version 3.5 should be available by now.

The Mac version of *CD Print* is obviously a port from... well, let's say another platform. The interface is not very Mac-like, just dull grey boxes with text and small icons. In use it allows long file names, but won't let you have a space in the name of a disc title. This means you have to replace spaces with underscores, obviously a hangover from the original platform. It's not all bad news though: the software does have some good features. It warns you of damaged files and allows you to write individual files rather than complete volumes. You compile the data for writing simply by dragging an icon from the hard disk window to the CD window. So if you want to select data from a variety of sources, *CD Print* can handle it. Overall *CD Print* is a reasonable package, but needs a bit of working on to make it feel like it belongs on a Mac.

Bear in mind that you only have one shot at writing the CD, so even one wrong bit of data and you could be up a famous creek without a canoe. If you intend to duplicate your gold master, then it's best to go for a guaranteed brand, such as TDK or Kodak – they're not that much more expensive. What's more, some CD writers are actually fussy about which gold masters you use – check which brand the manufacturer recommends when you buy the drive. That aside, though, if you want to cut some test CDs to make sure everything is in place, you could use a cheaper brand for this, and then use a higher grade gold master for the final disc.

Cutting the ROM

Once the CD writer is hooked up to your Mac, and you're ready to begin writing, you have to tell your Mac what files you want to put on the CD. When you've done this, your Mac has to compile a 'disc image' – a file that represents an exact duplicate of the final CD. You only have one shot at cutting a CD, so it's got to be right.

There are two ways of doing this. Originally, your Mac would have to group all the files together on the CD writer's hard disk, exactly the way they would be organised on the CD, including all the files and 'book-keeping' your Mac needs to read the disc. For CD writers without internal hard drives, this is an obvious disadvantage. Instead, your software creates a disc image containing a *list* of all the files to be put on the CD and their location on your Mac's hard disk. When it comes to writing, your Mac goes through this list and sends the files to the CD writer. The advantage with this is that the disc image only takes up a few K, instead of a whole 650Mb.

What about audio?

With a CD writer, not only can you make CD-ROMs, but also audio CDs. MicroNet bundles its CD writers with an extra program called *Disc-To-Disk* which can copy audio tracks to your hard disk and then onto a blank CD. Now, let's not get too enthusiastic here, because copying commercial audio CDs is illegal. So don't do it, okay? You can, however, save all your sound files to CD as audio tracks. This is handy for compiling sound libraries for sampling at a later date. With a microphone, you could even record your own special effects.

So, it's not quite as straighforward as using floppies, but as prices keep falling, CD writers become an ever more attractive option, especially for long-term, secure data storage. **MF**

JARGON BUSTERS

- CD-ROM. (Compact Disc Read Only Memory). A CD used to store computer data. But then, you knew that.
- Cutting, burning, pressing and mastering. These refer to the process of actually writing data to a CD, and they all mean pretty much the same thing. We think.
- Gold master. A special type of blank CD that is used in desktop CD-writers.
- OEMs (Original Equipment Manufacturers). The companies that actually make the drive mechanism. These drives are commonly sold on to companies who put the drives in a case and give them a brand name.
- SCSI (Small Computer Systems Interface). The interface your Mac uses to connect to an external device, such as a scanner, CD-ROM player or CD-writer.

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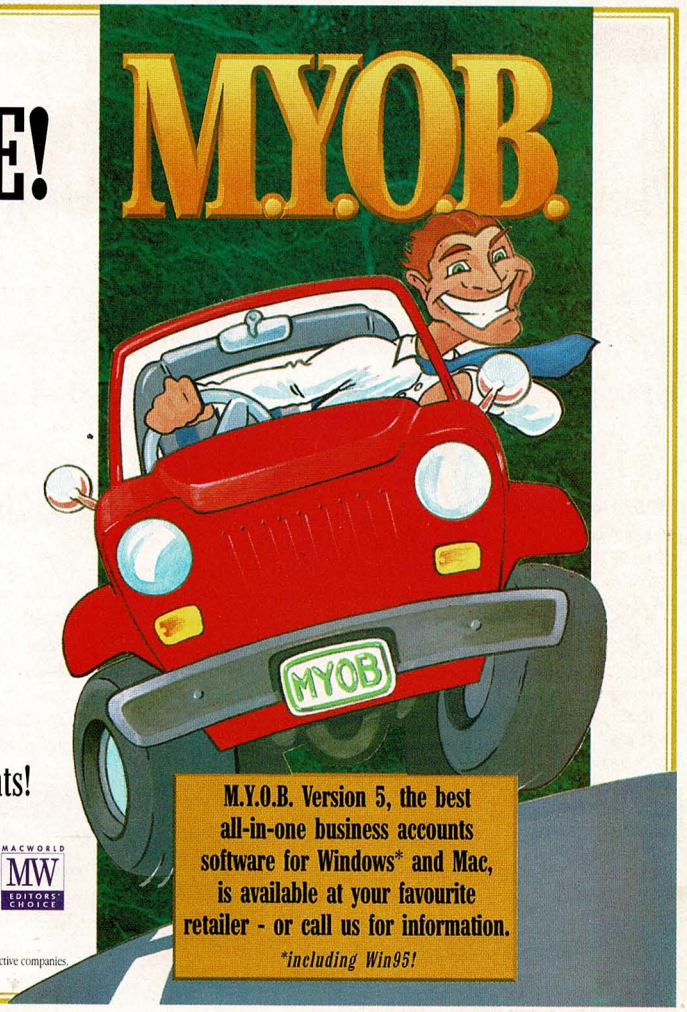

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LightningDraw GX 1.01

Since Apple overhauled QuickDraw, we've been waiting for the deluge of faster, smarter vector graphics programs. Alistair Dabbs checks out one of the first.

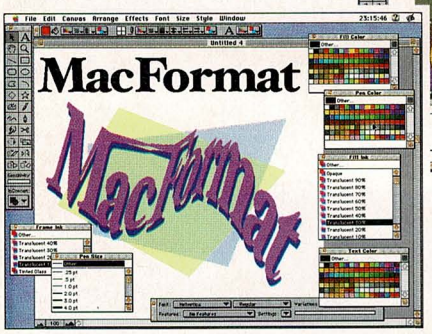
SPECIAL OFFER

Lari Software is currently offering *LightningDraw GX* for the special price of $99. This price is available until 31 March 1996, when it will increase to $299.

Postage is expected to cost something in the region of $27 and Lari Software is not currently planning to appoint a UK distributor.

Art applications just seem to get bigger, slower and more cumbersome with every new release. So it is good news to find a new package that's not only small, fast and easy to use, but is also still powerful enough to be useful to many design professionals.

LightningDraw GX is supplied in both Mac and PowerMac versions in the same box, and you install it simply by dragging the program folder onto your hard disk, taking up just over 2Mb of space. Check the memory requirement, and there's another surprise – the Mac version requires only 2Mb of RAM, and the PowerMac version a mere 1Mb. It's been a long time since a Mac graphics package could be so easily installed and run.

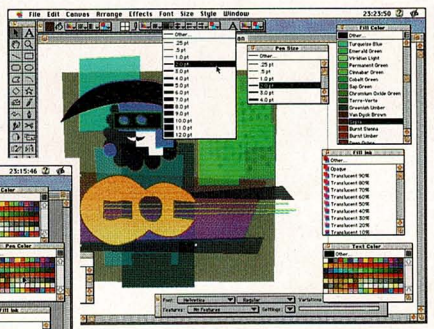


Once text has been converted to outlines, you can have a lot of fun playing with the Reshaper tool, creating effects that would involve some serious work in *FreeHand* or *Illustrator* to reproduce.

You do need to be running QuickDraw GX (a component of System 7.5 – see the box below right) for *LightningDraw* to work. But even with the sizeable RAM demands that this makes, the combination of the two still takes up less memory than *Adobe Illustrator* alone. However, once you get beyond the fact that *LightningDraw GX* is a vector graphics package, the similarity to *Illustrator* ends.

Builder art

Unlike nearly all vector graphics packages, *LightningDraw GX* appears to be designed for you to create artwork from bits and pieces, rather than from an artist's perspective. So, while you'd normally create an irregularly shaped object by tracing or plotting the irregular sides, *LightningDraw GX* makes it possible to add symmetrical objects to the canvas one after another, and then combine them automatically into a whole. The package also has pen and freehand tools, but they're not as fully featured as you'd expect.



Fill and Pen (outline) options can be selected from drop-down lists or dragged away to become floating palettes.

The combination – or subtraction – method of building artwork from components is controlled from an InConcert pop-up menu on the main Tool palette. You can make a newly added object, or a freehand pen stroke, merge with a previously selected object, act as an eraser on that object, or give a cut-out Reversal effect in combination with that object. It's not miles away from *Illustrator's* Pathfinder filters, except it takes only a fraction of a second and is an integrated feature of the package, not a slow-acting plug-in.

Once you have pieced together the basic forms on your canvas, you can edit the outlines. Although Bézier curves are used, you are not limited to clicking on nodes and handles; rather, in a similar way to *SmartSketch* you can click and drag anywhere on a straight or curved outline. Called the Reshaper tool, this is presented as *LightningDraw GX's* ultra-cool feature, and it offers you a lot of freedom to play around. But this is at the expense of accuracy, and it's difficult to predict how an object or line will react to the Reshaper.

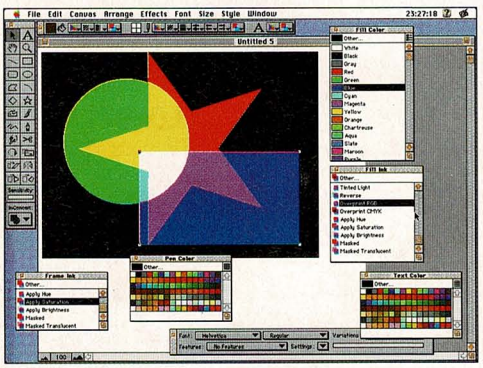
You can customise the degree to which the Reshaper affects the artwork using a Sensitivity slider on the main toolbox. The slider can also be used to adjust freehand brushstrokes and other tools. Again, this is an intuitive way of working for the experimental artist, but far too inaccurate for the professional graphic designer. It presents a paradox in a program that also offers drawing precision down to 0.0000156 inches and zoom levels between 3.125% and 3,200%.

Mixed with the wild freehand tools are standard vector tools that look as if they've leapt from the *Illustrator* tool palette, including Reflect, Rotate and Skew. There's also a reasonably successful 3D (Perspective) distortion tool. This combination of freeform, almost paint-like approach and vector tools is reminiscent of *SmartSketch*. The main difference (apart from a lack of Wacom EraserPen support) is that when you partially erase an object in *LightningDraw GX* to split it into smaller parts, those parts remain grouped as one entity, even when there seems to be a chasm carved through them.

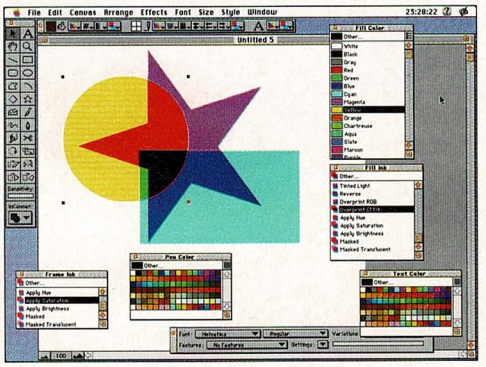
Powerful colour control

LightningDraw GX offers no wireframe mode; everything is presented in full 24-bit colour editable preview mode, yet screen redraws are imperceptible. Colour support is *LightningDraw GX's* real star feature. This is reinforced by the Colour palette, which is well-designed for fast selection of regularly used colouring effects.

If you pop up one of the colour



With the red, green and blue colours here set to act as true RGB, overlapping them generates light-based mixtures.



Swap the colours for CMYK, and they appear to overprint, mix and darken as they would when printed on paper.

SO JUST WHAT IS

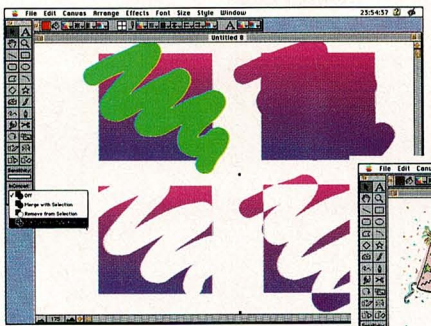
QuickDraw GX is Apple's overhaul of the Mac graphics and printing architecture, supplied as an optional part of System 7.5. It transforms the on-screen graphics and print performance of a Mac. The benefits are big. Say goodbye to the wobbly Print Monitor when background printing, to selecting printers in the Chooser and to time-consuming screen-redraws in graphics packages. And say goodbye to a couple of megabytes of RAM.

But graphics pros with RAM to spare find it difficult to go back once

palette menus and drag it away, it becomes a floating palette. But not only can you select colours and shades, you also have some surprisingly sophisticated control over true transparency effects. Overlapping transparent colours require no preparation or filters: you just specify a transparency level for any object, and you're given an accurate on-screen preview.

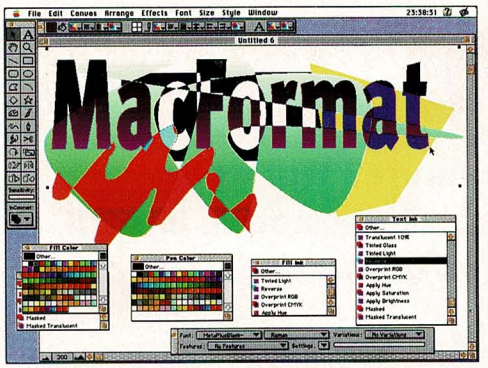
Furthermore, the display intelligently mimics the effect of overlapping colours according to the colour mode you have selected. For example, additive light colours (such as the RGB system used by your monitor) will brighten when overlapped, while subtractive printing colours (CMYK) will darken. This kind of powerful feature is breathtaking in its simplicity, and Lari Software could sell the package on the strength of this alone.

Equally surprising is the ease with which you can create blended colours and blended transparency levels within an object. It's similar to working in *Photoshop* but a great deal faster. The instantaneous colour and transparency effects you can create in *LightningDraw GX* would take much longer using almost any other mainstream vector graphics package.

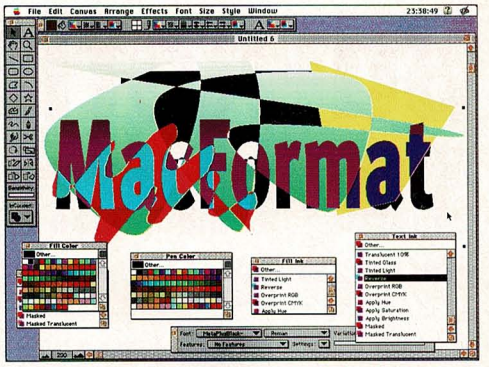


Painting over an object needn't just add colour; you can also use it to merge with a selected object, remove areas from it or even create a reverse effect in combination with it.

You can generate a particularly neat effect by applying Reverse colour to an object. Once set to Reverse, any areas of that object subsequently covered by another show through as its optical colour negative equivalent. Cover part of an object with black, and it shows through as white; cover it with red and it shows through as green. All the while, everything remains fully editable, and again, there's no need to resort to cumbersome plug-in filters.



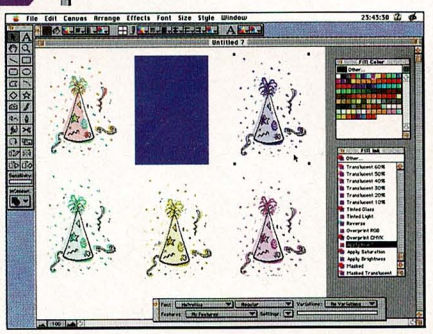
This text string is given Reverse colour style. When you place coloured objects on the top, negative colours show through...



...even as the text is dragged down behind other objects. You can create the effect in real time, without applying special filters.

Cool effects

Perhaps one of *LightningDraw GX's* strongest features for the dabbler is its type support. Being a GX-enabled program, it gives you access to the full range of features built into GX fonts, several of which are supplied free with the package. This means you can make use of custom ligatures, fractions and special characters, plus a variety of distinctive weight effects built into the font design. GX fonts also enable you to incorporate multiple language and non-Roman scripts, even mixing left-to-right and right-to-left languages on the same line.



Apply Hue is a clever effect. Paste any bitmap onto the canvas, place a solid coloured object over the top, and that colour is applied to the bitmap, hiding the coloured object from view.

Your standard non-GX fonts (which are converted to GX-readable-only format when you install QuickDraw GX) can also benefit from freeform alteration, at least indirectly. *LightningDraw GX* provides a standard Convert to Outlines command – using the Reshaper tool, you can distort it as much as you like, even making type twist or appear as a string of characters wrapping back around itself. The freedom this feature gives you is dazzling.

For the Web master, there is a simple export utility that helps convert vector artwork to colour bitmaps for use on Web pages. The fact that you cannot export directly to GIF or JPEG with a definable colour table indicates that the feature was probably designed with loftier purposes in mind. But being able to save to a PICT file with a *Photoshop 2.0* signature will be of use to Web site designers, especially since it has a good anti-aliasing quality.

All this makes *LightningDraw GX's* almost childish set of tutorials in the manual seem out of place. Then again, there are plenty of intentionally low-end features in the program, not least the one that creates appallingly symmetrical starbursts. Yet it doesn't fit into the same kind of leisure-based market as *SmartSketch*, despite its outward similarities. The RAM demands of QuickDraw GX and the amazing colour features mark it out as a more professional tool.

Ultimately, you'll find *LightningDraw GX* dissatisfying. It's difficult to tell if it is a high or low-end program, or if Lari Software is just making a blunt attempt to build a big potential market. But at this low price, you could put up with it, even if only to make use of the superb transparency tools. **MF**

SMARTY PANTS

SmartSketch is an impressive hybrid of vector drawing program and bitmap paint package, all in one. If it has one shortcoming, that's its limited control of type – an area where *LightningDraw GX* excels. *SmartSketch* was reviewed in MACFORMAT 30 and scored 89%. It costs £54.99. For more details, call CGS Computerbild on 0181 679 7307.

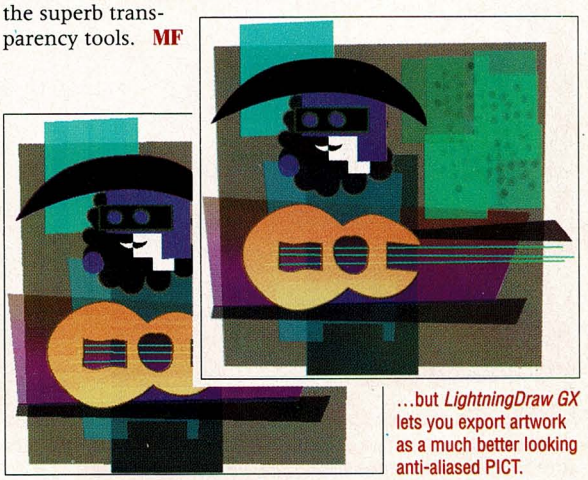
QUICKDRAW GX?

they've made the GX jump. The burst of speed and features like drag-and-drop printing are popular. It also opens up a world, albeit a limited one, of GX-enabled applications with high-performance graphics and the use of GX fonts. But Mac developers are holding back, which is a shame since certain Chooser utilities such as those with fax software are likely to be disabled in the process of upgrading to GX. But GX's intensive demand on system RAM will restrict it to a high-end ghetto for some time yet.

LIGHTNING DRAW GX

Price: $99 until 31 March 1996. **Out:** now.
Requires: LCII or better (PowerMac native available), 2Mb of RAM (1Mb for PowerMac), System 7.5 or later, CD-ROM drive, 2Mb of free RAM.
Contact: Lari Software 001 919 968 0701.
Web site: http://www.larisoftware.com/

MACFORMAT RATING 75%



To put Picasso on the Web, you'd normally have to create a screen grab like this, complete with jaggies...

...but *LightningDraw GX* lets you export artwork as a much better looking anti-aliased PICT.

3d-Active

Is 3D clip art the way of the future? Will we soon be importing 3D models and QuickTime movies into all our documents? Does this new software pave the way?

3d-Active is a range of clip art CDs containing genuine 3D models complete with surface-mapped textures in place and orbital camera paths pre-recorded. So, instead of browsing through masses of image files, you actually browse the 3D data created for 54 separate models.

This means that you can view and save each model as 2D rendered bitmap images (in both 8-bit or 24-bit), or as exportable 3D models in Apple's 3DMF and DXF format, or even as QuickTime movies, with the models revolving in either rendered or wireframe mode (only the latter as DXFs).

All this is fun, especially playing with the revolving previews in the browser. However, the real fun starts when you try it out on a PowerMac – you can then install Apple's QuickDraw 3D from the CD too. This enables you to use the 3DMF format for pasting the clip art into presentations, documents and even the Scrapbook, and play with them in 3D space. Without a PowerMac, you can't really do much with the models other than fool about in the browser and accept the default views.

Our 7100/80 with 49Mb of RAM (RAM Doubled) took half an hour to announce that *Strata Studio Pro* needed more RAM to open the files. We managed to open the smallest high-res 3DMF file (just under 300K) only after much coaxing and cajoling. Plastic Thought says the problem is that the 3D method used creates 'huge polygon counts'. It suggests using the DXF versions and re-rendering them to suit. The upshot? While *3d-Active* is a great value, high quality product for very high-end PowerMac graphics users, it is a very limited and expensive bit of fun for everyone else.

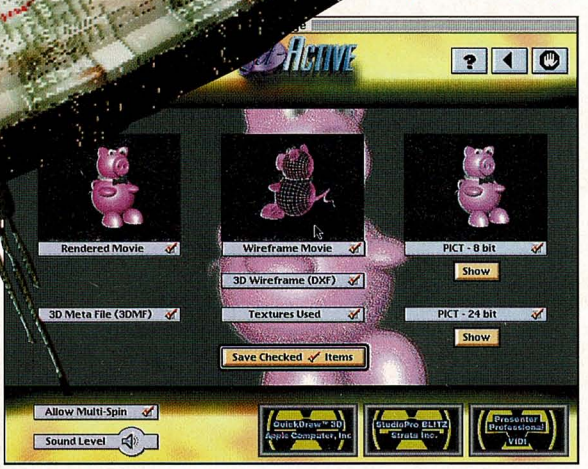
ALISTAIR DABBS

MAKE LIFE EASIER

You can use the handy browser supplied to view the images on the *3d-Active* CD or try to open them in a 3D program (RAM permitting) – or simply go straight to the PICT versions thoughtfully included in a separate folder.

Take a look at the demo of *3d-Active* on this issue's Cover CD

The Space Station is the largest 3DMF file on the disk. You haven't a hope in Hell of opening it.



This little piggy went to market... but beforehand there's the opportunity to save him in six formats, from rendered bitmaps through to QuickTime movies.

The browser's main interface enables you to choose from five categories. The large 3D icons revolve when you pass the mouse pointer over them.

This sleek, futuristic plane screeched to a halt as soon as a double-click was applied. Hummph!

3D-ACTIVE VOLUME 1

Price: $79.95
Requires: LCII or better (PowerMac with 16Mb of RAM for QuickDraw 3D), System 7 or later, CD-ROM drive.
Contact: Plastic Thought 00 1 403 429 5051
Web site: http://www.3d-Active.com/

MACFORMAT RATING 76%

Terra Forma

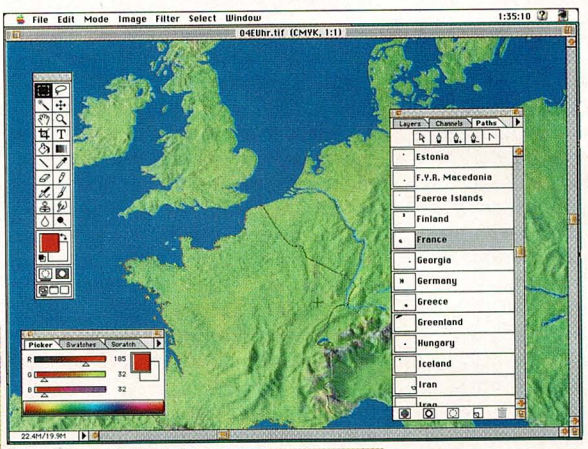
A set of high resolution colour images of the world, offering enhanced rivers and mountains, powerful multi-layer features... you name it!

If you're lucky enough to have experimented with Digital Wisdom's *Mountain High* cartography products, you'll know what to expect from Andromeda Interactive's *Terra Forma*. You get the same attention to detail, the same high-quality satellite-rendered images... even the same sort of luxury presentation case.

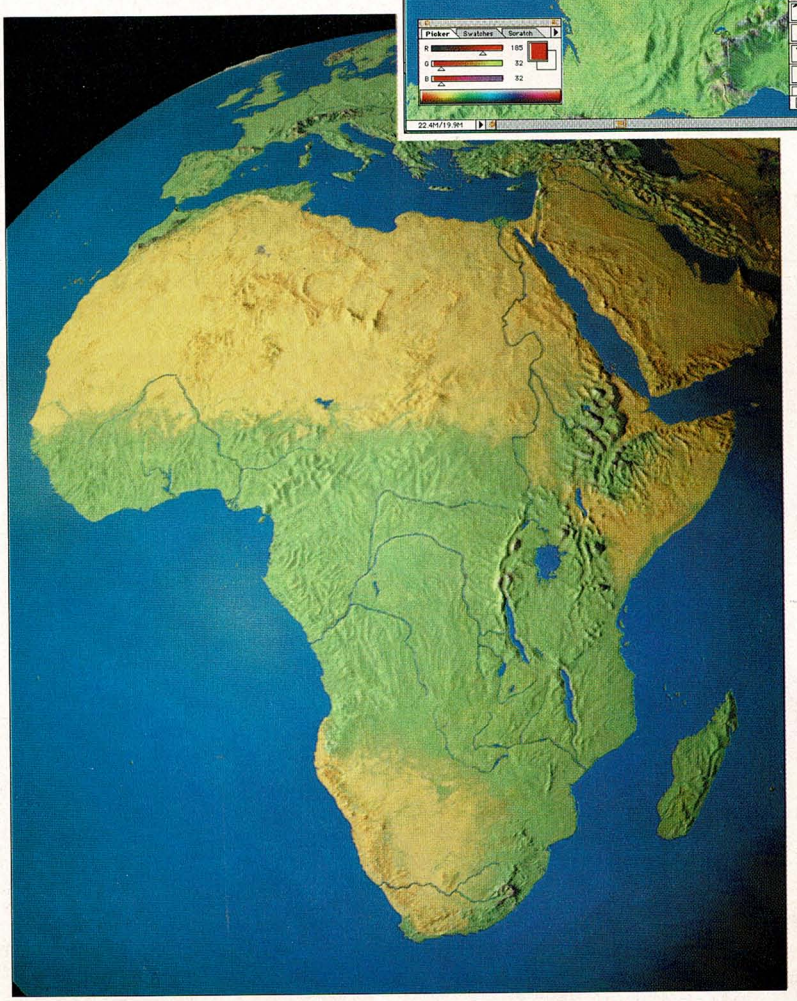
However, *Terra Forma* is, in every other respect, quite different from *Mountain High*. It's not a series of grey-scale images for colouring and enhancing, but a five-CD set of ready-coloured and pre-traced maps for either customising or immediate use. The first three CDs contain global and continental maps in *Photoshop* TIFF format, at roughly 24Mb per file. Although you can read them using any TIFF-compatible graphics package, when you open them in *Photoshop* it is revealed that country borders and natural lines, for example lakes and coasts, have been picked out as editable paths. This makes it easy to cut out, mask, enhance, re-colour or otherwise manipulate them to suit.

The last two CDs are vector EPS text maps with bitmap EPS maps placed behind the text, in separate Macromedia *FreeHand* and Adobe *Illustrator* formats. Again, you can edit outlines and customise text to create your own specific cartographic product. The vector files are extensively layered to help you in this process.

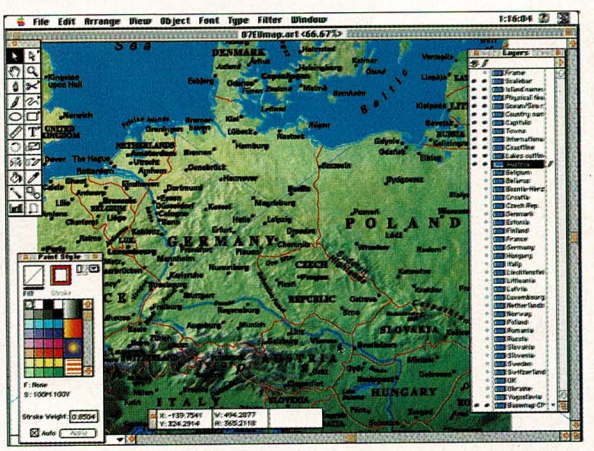
Cartographers might appreciate the attention to detail and superb editing features, but *Terra Forma* is a worthy addition to any graphic design professional's shelf. They're more than just clip art, but the quality of the maps is simply gorgeous. **Alistair Dabbs**



A view of Europe in *Photoshop* before any changes are made. Country boundaries are traced as editable paths, ready for manipulation and colouring.



The quality and clarity of the maps make them a wonderful addition to any graphic designer's library.



The layering of the vector EPS files is exhaustive and a wonderful time-saver. Similar items have been grouped, such as all boundaries and all town names.

Terra Forma

Price: £464.13
Requires: any Mac, a graphics application capable of reading TIFF or EPS files, CD-ROM drive
Contact: Andromeda Interactive on 01235 527303
Web site: http://www.andromeda.co.uk/

MACFORMAT RATING 90%

MOUNTAINOUS

Mountain High Maps is a two-CD set of grey-scale maps – you add the colour as needed. There's an extra CD of 'Frontiers' and another of full-colour as well as grey globes, complete with 3D surface relief – simply stunning to behold. *Mountain High Maps* scored 90% back in MACFORMAT 29. Call Digital Wisdom on 01223 566250 for more information.

HoTMetaL PRO 2

Looking around the Web, you might think mistakes are compulsory and standards non-existent. Isn't there a package that checks everything before it's published?

Try it for yourself with the demo of *HoTMetaL 2* on this issue's Cover CD

Way back in the mists of time (or 1989, anyway) a chap called Tim Berners-Lee wrote the first ever Web browser. The idea was to make it easier for him and the other scientists at CERN to get at one another's information by storing it in a standard, machine-independent format. This browser included a built-in page editor, so anyone using it could publish on the fledgling Web system.

The browsing part of the system has remained more or less intact and standardised over the years. Sadly, the authoring side of things fell by the wayside, and there's no standard way of putting a page together. Most Web authors use a plain text editor to enter the awkward HTML (HyperText Mark-up Language) codes that make up a Web page. This is a tedious process, not least because you continually have to switch between editor and Web browser to check how it will look.

HoTMetaL is just about the only 'standard' HTML authoring package there is, and for simple page construction it's more than adequate. You can either type your text in directly, or load a word processor file and the program will have a good stab at converting it. Adding styles like headings, italics and so on is easy too – just select the text and click the relevant icon from one of the floating palettes. The HTML codes are shown as graphical tag icons in the text, but you can switch these off, giving you a better (though not perfect) idea of what the page will actually look like.

Including images in your page is as simple as selecting a file (though it does have to be in Web-standard GIF format to load). Any further editing of the image's parameters, like its alignment with the text, is done using the **Edit SGML Attributes...** menu option – not very intuitive. Image width and height definition are supported, so browsers like *Netscape* can lay out your pages as soon as they have the text, leaving spaces for the images to be downloaded into, which speeds up the browsing process. Once again, though, there's a rub – you have to type in the width and height, despite the fact that the images have already been loaded.

Anything beyond simple mark-up is handled using the dreaded **Edit SGML Attributes...** box again, which changes depending on what you're editing. For instance, using it while putting together a form will bring up a semi-comprehensible list of options like **Type**, **Name** and **Value**. Using it to edit a hotlink is a different matter – do you know what **Methods**, **Rel**, **Rev** and so on are meant to be set to? If you do, you might as well be entering your HTML commands by hand.

HoTMetaL PRO 2 does have some welcome inclusions. Coding up tables in HTML is a nightmare, so a graphical table editor is included to help you along. It works well, despite a few display glitches and its reliance on – you guessed it – the **SGML Attributes...** box. A spell-checker and thesaurus are also useful features that you don't find in shareware packages. The spell-checker ignores HTML tags, too. And possibly the most hyped feature in the package is the HTML validator. If you've used any non-standard, unworkable features at all, this tells you.

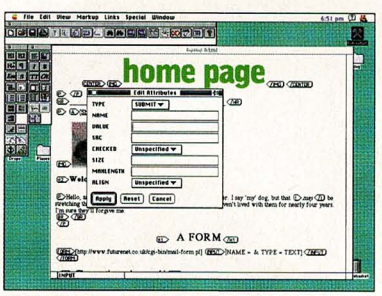
HoTMetaL PRO 2 is a perfectly good way of building Web pages. The strict adherence to standards and built-in checking might make it look like a good option for the beginner, but a true beginners' authoring package would hide the HTML completely. After all, how many people who use *QuarkXPress* understand the intricacies of its file format – or need to?

If you want to write 'correct' HTML, or you liked earlier versions, go for *HoTMetaL PRO 2*. Otherwise, choose the more user-friendly *Adobe PageMill* (which scored 90% in MACFORMAT 35), or hang on for the much-anticipated *Netscape Navigator Gold*.

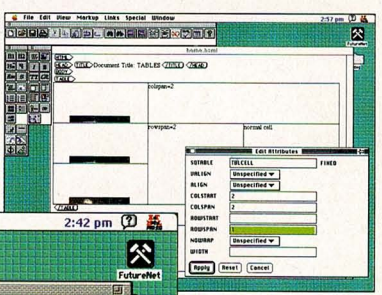
NEIL ELKINS

SGML AND HTML

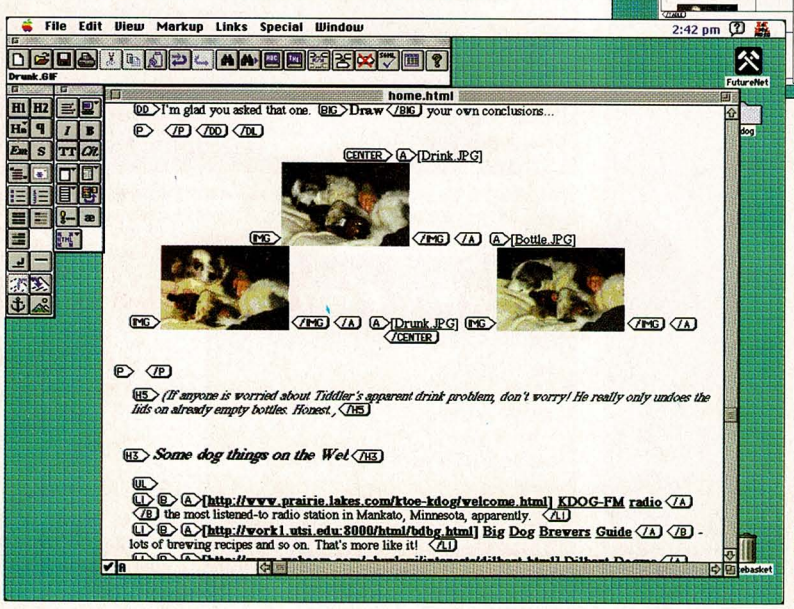
HTML is the language used to build Web pages, and SGML (Standard Generalised Mark-up Language) is its big brother. HTML is just one of the file formats described by SGML. Should this bother you? Well, no, but *HoTMetaL PRO 2* seems to be obsessed with it...



Inside the guts of an HTML tag. If you don't know what all this means, you're stuck.



The table editor in (glitchy) action. Those are pictures in the left hand column, honest.


File Edit View Markup Links Special Window
2:42 pm
home.html
I'm glad you asked that one. Draw your own conclusions...
Drink.JPG
Bottle.JPG
Drink.JPG
(If anyone is worried about Tiddler's apparent drink problem, don't worry! He really only undoes the lids on already empty bottles. Honest.)
Some dog things on the Wel
http://www.prairie.lakes.com/ktoe-kdog/welcome.html KDOG-FM radio
the most listened-to radio station in Mankato, Minnesota, apparently.
http://work1.utsi.edu:8000/html/bdbg.html Big Dog Brewers Guide
lots of brewing recipes and so on. That's more like it!

Note the handy floating palettes and the clear display of HTML tags in *HoTMetaL PRO 2's* main screen. Good start...

HOTMETAL PRO 2.0

Price: £116.33. **Out:** now.
Requires: LC or better, 8Mb of free RAM, System 7 or later.
Contact: User Interface Technologies on 01223 302041.

FEATURES 75%
The spell-checker, thesaurus and HTML validator are useful features.

EASE OF USE 70%
As long as you don't push it, it's fine, but attempting to achieve anything even slightly advanced is tricky.

DOCUMENTATION 85%
A good, medium-sized manual covers everything for beginners upwards.

VALUE FOR MONEY 60%
PageMill is a similar price and probably more suitable for beginners.

MACFORMAT RATING 70%

CGS COMPUTERBILD.

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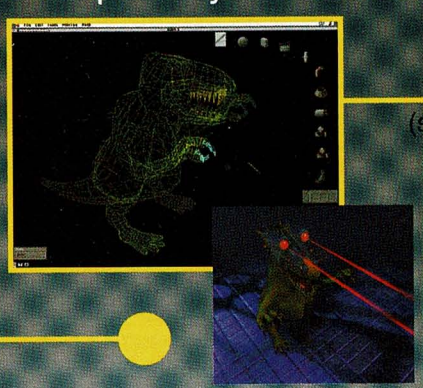

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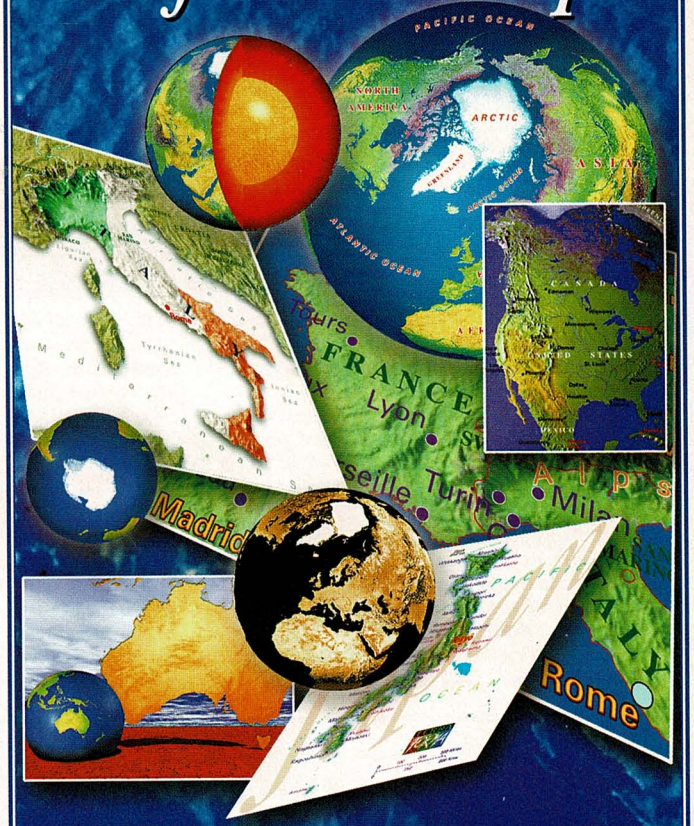

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SoundEdit 16 version 2

Creating a soundtrack for a multimedia production or a QuickTime movie? Ian Waugh looks at 'The Most Powerful Tool For Multimedia Audio'. Probably.

MULTIMEDIA MEN

SoundEdit 16 has been used in the development of many multimedia CD-ROMs including P*assage To Vietnam*, *Total Distortion*, The Cranberries' *Doors And Windows* CD, and a Toyota Interactive CD-ROM.

It's a fact, the audio part of an audiovisual production – be it a business presentation, a film, or a QuickTime movie – has a greater impact on the viewer than the video. In other words, no matter how brilliant the visuals, if the sound is poor the whole thing will be perceived as poor. So to do justice to your stunning visuals, you need suitable tools to make your audio great.

Macromedia's *SoundEdit* has been around for nine years and has been widely used for editing digital audio and constructing QuickTime movie audio tracks. For much of this time it has had little competition, but advances in direct-to-disk recording, Mac hardware and QuickTime have meant that most direct-to-disk software can import a QuickTime movie and synchronise a soundtrack to it. But, while most direct-to-disk programs are designed for the music market as an alternative to a multi-track tape recorder, *SoundEdit's* approach is from the multimedia direction and it has unique features to help you with sound and video synchronisation.

Including the Sync

The main window contains the audio tracks, and you can create as many as you need. When you open a QuickTime movie for editing, a set of thumbnail images appears along the top of the Sound window. It's therefore a fairly easy matter to line up the audio tracks with the images so the two are synchronised. You can zoom in and line up the soundtracks manually – which is much easier than it sounds – but for pin-point accuracy, you can scroll to the frame in the movie and insert a Cue point just below the Time line. You can then use this to sync the audio to. But there are no Anchor Points (sometimes called Q Points) or a Snap function, which are common in direct-to-disk programs. An Anchor Point is simply a reference point you select in an audio file – a cymbal crash or the start of a speech, for example. It's used to line up audio events with each other and with video events. Lining up events in *SoundEdit* is still easy, but the inclusion of these would have made it even simpler.

There is a host of editing and processing features to help you get the sound exactly as you want it. You can draw a volume envelope across the waveform to change the volume levels within a sound and you can also use this envelope to create a crossfade, to make a sound move from the left stereo channel to the right, or to make one sound slowly change into another. Each sound track has its own volume control so you can balance its volume against the other tracks. There is also a Deluxe Mixer with which you can balance the level, adjust the pan positions of any number of tracks, and mix them down into another track.

Effectively tweaking

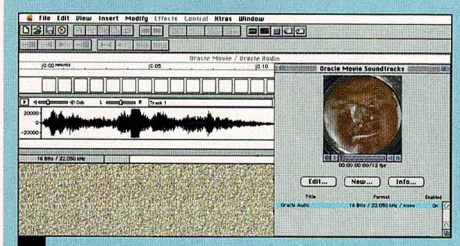
There are 17 effects you can use to enhance a sound and tidy up recordings. The **Noise Gate** can remove excessive hiss or background noise. **Normalise** makes a sound as loud as possible without distorting it. **Smooth** removes clicks and pops. **Pitch Shift** changes the pitch and speed of a sound – turn a voice into Mickey Mouse or Frank Bruno. With **Tempo** you can change the speed without changing pitch, for example to speed up a voice to cram more information into a given time. **Delay, Echo, Flanger, Bender** and **Reverb** may be of use on musical material, voices and sound effects. In fact, they can also help you to create effects and trans-

THE NEW BITS

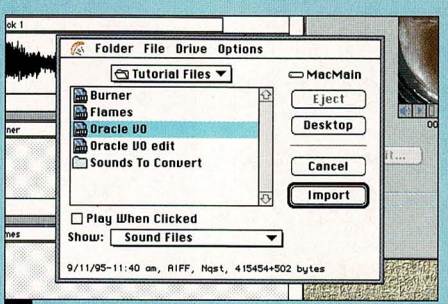
The latest version of *SoundEdit 16* includes many new features:

- It is PowerPC Native for enhanced performance on PowerMacs.
- The Automator, a batch processing utility to transform file formats and sample rates. For example, you could convert a group of Mac 16-bit 44.1kHz files to Windows 8-bit 22.05kHz files using only one command.
- Audio CD capture. Transfer data from an audio CD direct to your hard disk.
- Stereo mixer. You can use this to change the volumes of different tracks and to pan sounds left and right during mixing.
- 7-band parametric equaliser for sound shaping and filtering.
- Support for additional file formats including IMA (Interactive Multimedia Association) ADPCM, the Sun .au file format, which is common on the Internet, and µ-Law compression. It also includes better downsampling options for retaining sound quality when converting to lower sample resolutions.
- An enhanced user interface which conforms to the design of other Macromedia products. This gives you more visual feedback when recording and playing files, a customisable effects toolbar and floating windows.
- 300 royalty-free clip sounds.
- The Xtras Developer Kit, which enables developers to write new modules (one for the more technically minded).

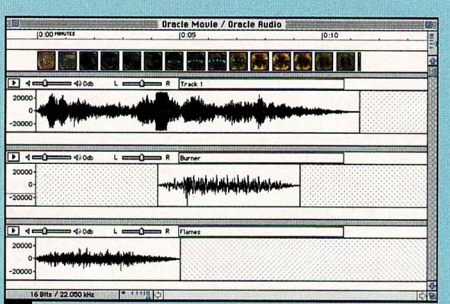
CREATING A SOUNDTRACK WITH SOUNDEDIT 16



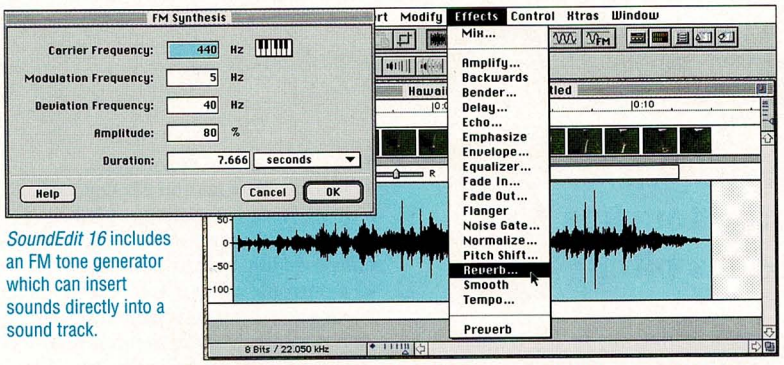
1 Open a movie and click on the **Edit** button. If the movie already contains a soundtrack this will appear in the Sound window.



2 Import the other sound files you want to use. Each will appear on its own track in the Sound Window.



3 Drag the sound tracks left and right so they line up with the thumbnail images they are supposed to synchronise with.



SoundEdit 16 includes an FM tone generator which can insert sounds directly into a sound track.

SoundEdit 16 contains a host of effects, many of which you won't find in dedicated direct-to-disk recording programs.

form existing ones. There's also an equaliser, or tone control, which can cut or boost a particular range of frequencies. You can use it to make a sound bassy or toppy, or to emphasise frequencies. It looks and works just like the equaliser on your home hi-fi.

But when effects such as **Reverb** are applied to a sound file they physically alter the file, unlike with direct-to-disk programs which create a duplicate of that file on which you work, with your original file staying intact.

You can record your own sounds too. It's a slightly more sophisticated process than using the Sound Control Panel, and you can't record a sound while listening to other tracks play back, or while watching the movie. This, of course, is where the dedicated direct-to-disk programs excel. To achieve this you can use the Mac's built-in microphone (or its digital recording circuitry if you have an AV Mac). If you have a digital audio card such as Digidesign's Audiomedia II, you can use that. You can also lift tracks directly from an audio CD. This is an excellent routine (although it can be done easily using just QuickTime) as it preserves the quality of the audio.

Des-res

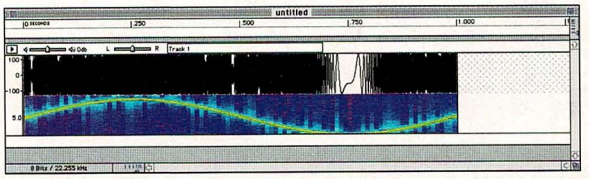
When you are creating a soundtrack, it's best to work with the highest quality of audio you can until it's finished and then either downsample it, or reduce the resolution to whatever is required. Most multimedia titles, for example, use a sample rate of 22.05kHz rather than the standard CD rate of 44.1kHz. You won't appreciate the difference through Mac speakers, and the net result is files that are only half the size. *SoundEdit* has a wide range of conversion facilities which can handle 8-bit and 16-bit sound at rates from 5.564kHz – barely adequate for speech – right up to 48kHz, which is DAT quality, although you'd need superhuman ears and a good sound system to tell the difference. But if you're so inclined, you can edit sounds sampled at custom rates right up to 64kHz.

The program also supports six types of compression and compression rates. The greater the compression, the smaller the audio file, but the trade-off is a reduction in quality. To help preserve the quality *SoundEdit* has an option to boost higher frequencies, compensating for the loss which occurs when you reduce the sample rate. There is also a **Dither** option which helps compensate for the lack of clarity which results from lowering the resolution from 16-bit to 8-bit.

Xtras

The pack includes the Automator utility, which can batch process a group of audio files, changing their file format, sample rate and compression scheme. This is ideal if you want to use samples from a range of sources such as the Internet or a PC. Programmers will also welcome the Xtras Developer Kit, which enables techies to create Xtras or plug-ins for the system. And if you need to analyse a sound, you can activate a 2D and 3D Spectrum analyser.

The ability to see, edit, layer and arrange several audio tracks against QuickTime thumbnail images is where *SoundEdit 16* scores points. It also has an excellent range of effects, some of which many dedicated recording programs lack. *SoundEdit 16* has long been regarded as the industry standard in digital audio editing, and this new version is unlikely to change that. It is still an ideal tool for adding soundtracks to QuickTime movies. **MF**



The Spectrum display shows you the frequencies of sounds to help you analyse them.

SOUNDEDIT 16 VERSION 2

Price: £410.08. **Out:** now.
Requires: LCII or better (PowerMac recommended), 6Mb of RAM (8Mb recommended), System 7.1 or later, 15Mb of hard disk space with an access time of 40ms or less, double-speed CD-ROM drive.
Contact: Computers Unlimited on 0181 200 8282.

FEATURES 82%
A little thin on recording flexibility, but lots of hunky, chunky processing features, a developer's toolkit and over 300 royalty-free sounds.

EASE OF USE 82%
Given the constraints of QuickTime movies, once you grasp the basics, *SoundEdit 16* is easy to use.

DOCUMENTATION 78%
The manual has useful tutorials, though they could be more detailed. There's a good reference section and on-line help.

VALUE FOR MONEY 74%
It's the *Adobe Premiere* of the digital audio world – a professional product at a professional price.

MACFORMAT RATING 80%

DIRECT-TO-DISK

For more details on direct-to-disk recording, see the *Session 2* review in MACFORMAT 33.

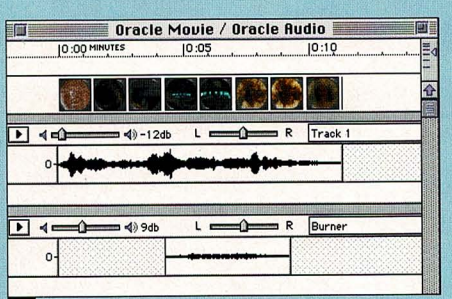
BOING!

Before digital reverb was invented, studios used large metal plates and long tubes containing springs to simulate concert hall acoustics.

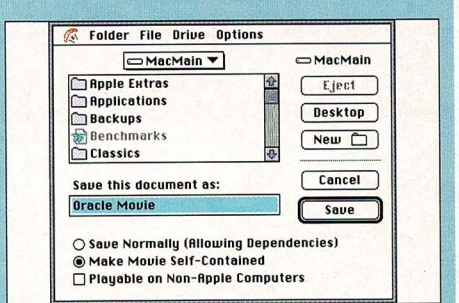
UPGRADE

If you already own version 1 of *SoundEdit*, you can upgrade it to version 2 for £116.33. For more details call Computers Unlimited on 0181 200 8282.

4 For pin-point accuracy, scroll to a frame in the movie and insert a Cue Point. This appears below the Time Ruler, making it easy to align sound tracks.



5 Use the **Gain** sliders above each audio track to fine tune the relative volume levels between tracks.



6 You can save the movie in a variety of formats: Normal, which requires access to files scattered around the disk; as a self-contained movie; or in a format suitable to run using other software or operating systems.

Act! 2.5

If your contacts list is large, trying to keep it in order can soon get out of hand. Rod Lawton touches base with this utility to see if it improves his pitch.

If you're in sales or marketing and you want to do your job properly, you need to note down the outcome of any discussions you have, keep a record of all correspondence, store the terms of agreements you've reached and probably also keep a list of ideas for future business.

Or if your contact is a new one, you'll be especially keen to keep it going with regular call-backs, careful notes about the other individual's requirements and type of business, and maybe add them to a list of clients your company sends promotional mail-outs to.

With all your contacts, you'll need to plan your next conversations – when they'll be and what about – and note down jobs that arise from them. For example, catalogues you've promised to send, reports you've agreed to compile, and so on. Most of us do this from day to day without needing specialist software. But then most of us deal regularly with only a few others. If you are a sales or marketing professional, your contact list could include hundreds of people, and a diary and a pen may not be enough to keep you ahead of the competition.

The answer to everything?

Act! 2.5 is the latest version of Symantec's 'contact management' application. It can be used to list all the client information you need, plan future phone calls, build up client histories, attach documents to records, schedule your appointments and tasks, and even compile reports for budget-conscious department heads.

You'll spend much of your time looking at the Contact Window, which displays your contacts one at a time, like a card index database. The standard layout offers a formidable amount of information divided into four areas: General (name, phone number, address); Activities (schedules calls, meetings and to-do's); Status (the outcome of your last action); User Fields (fields you can define for your own purposes). There are many Window layouts to choose from, based on your needs and your monitor size.

The Contact Window has a handy tool bar which you can use to schedule calls, meetings or to-do's, write letters (using the built-in word processor), view or edit notes, display contact or task lists and call up day, week or month-view calendars.

Perhaps one of *Act!'s* biggest strengths is the way you can isolate sets of contacts that you might want to send mail-outs, for example, or who constitute 'hot' leads. It does this using Groups and Lookups. Groups are created user-defined sets of contacts that are semi-permanent, while Lookups are like database searches – you set them up as and when you need them.

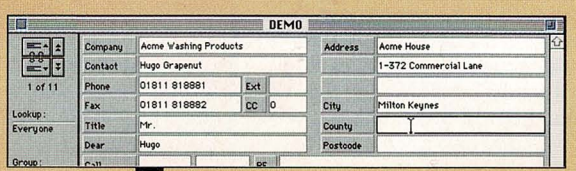
There are lots of other useful features. For example, after a telephone conversation with a contact you can schedule an activity – preparing a price

DESIGN IT YOURSELF

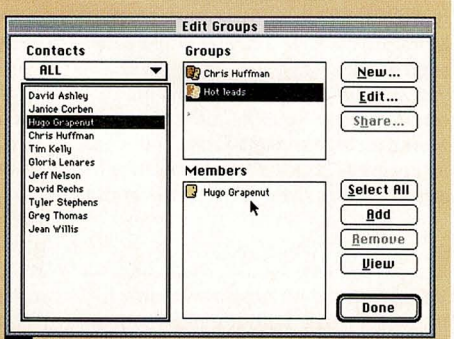
If you don't like any of the contact window layouts that come with *Act!*, you can design your own using the *Act!* Layout Editor, available from Symantec's on-line services.

ADDING A NEW CLIENT

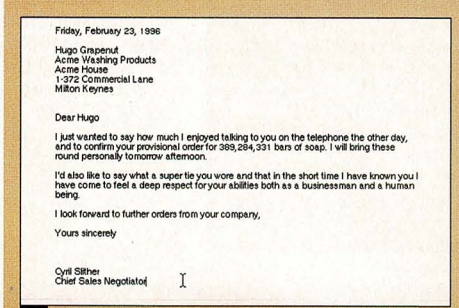
Act! is based around people, and from the moment you first learn their name to the moment you retire, they expire or you're sacked, you can log every single thing that passes between you...



1 The first thing to do is to record everything you know about your new contact in the Contact Window. At first, you might just know their name, phone number and address, but there are fields to add later on.



2 Now that you've typed in the raw details, it's time to assign your new contact to a group. In this case we've created a new one, called 'Hot leads'. Groups are one of *Act!'s* powerful contact management features – using filters like those in database searches, you can create 'sets' of contacts in particular areas, late payers, or whatever you like.



Friday, February 23, 1996

Hugo Grapenut
Acme Washing Products
Acme House
1-372 Commercial Lane
Milton Keynes

Dear Hugo

I just wanted to say how much I enjoyed talking to you on the telephone the other day, and to confirm your provisional order for 389,284,331 bars of soap. I will bring these round personally tomorrow afternoon.

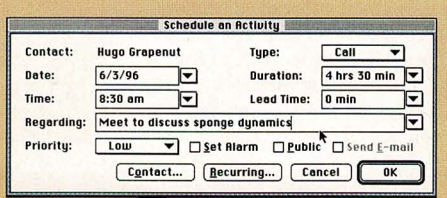
I'd also like to say what a super tie you wore and that in the short time I have known you I have come to feel a deep respect for your abilities both as a businessman and a human being.

I look forward to further orders from your company,

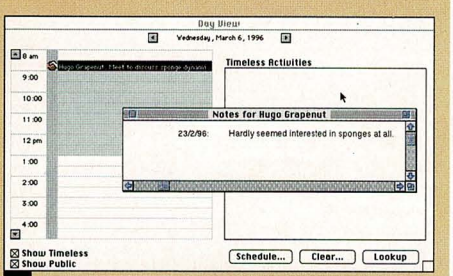
Yours sincerely

Cyril Slither
Chief Sales Negotiator

3 And with that information safely stored away, you can bash out a letter to follow up your first phone call. This is saved and printed as a separate document, but it will be attached to your contact's 'history'.



4 Time to schedule your first proper meeting. *Act!'s* scheduling window has a handy drop-down calendar for choosing dates, and you can choose the event type too (meetings or scheduled calls and so on).



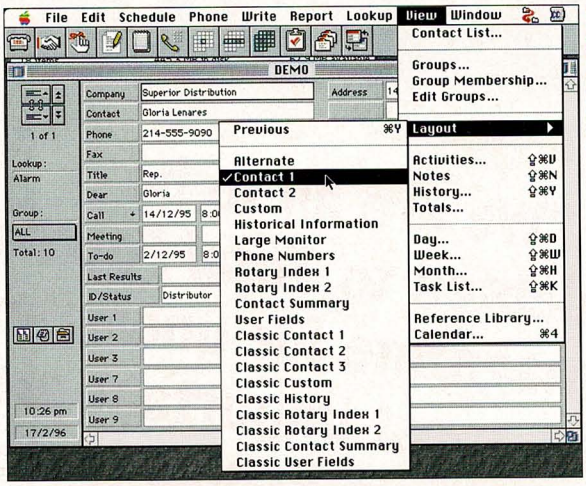
6 But you have got time to meet up with Mr Grapenut – the appointment appeared automatically in your calendar window. You can also note the results of your meeting – this will be attached to your client's 'history' too. Which, by the look of it, ended just about now.

Calls:

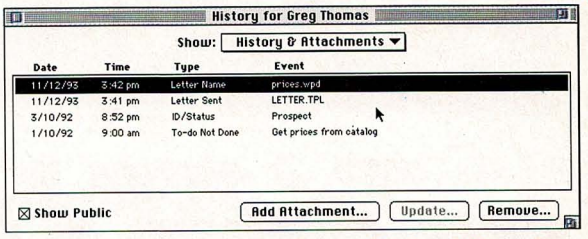
Company	Contact	CC	Phone	Ext	Date	Time
National Paper	Janice Corben	1	212-555-6756		5/12/95	8:30 am
Pop Printing	David Rechs	1	813-555-6281		8/12/95	8:00 am
OK Office Supply	Jeff Nelson	1	214-555-0023		12/12/95	2:00 pm
Jordon Office Equip...	Jean Willis	1	214-555-1098		13/12/95	8:30 am
Superior Distributi...	Gloria Lenares	1	214-555-9090		14/12/95	8:00 am
National Paper	Janice Corben	1	212-555-6756		14/12/95	1:00 pm
Express Office Supp...	Tim Kelly	1	214-555-4909		15/12/95	8:00 am
Pop Printing	David Rechs	1	813-555-6281		15/12/95	2:15 pm
Paper Moon	Tyler Stephens	1	214-555-3421		18/12/95	3:00 pm
Irvine Card Stock	David Ashley	1	415-555-4590		22/12/95	9:00 am
Paper Moon	Tyler Stephens	1	214-555-3421		8/1/96	2:30 pm
Superior Distributi...	Gloria Lenares	1	214-555-9090		12/1/96	3:45 pm

Total Calls: 12

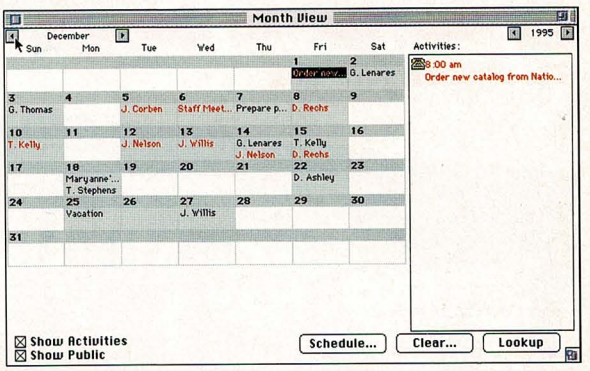
5 But now your boss is getting edgy about the amount of free time you seem to have... Time to compile a quick activity report to prove you haven't got time for that sales trip to Grimsby docks.



You don't like the look of the standard Contact Window? There are lots of others to choose from, including layouts for 9-inch screen Classic owners.


History for Greg Thomas
Show: History & Attachments
Date Time Type Event
11/12/93 3:42 pm Letter Name prices.wpd
11/12/93 3:41 pm Letter Sent LETTER.TPL
3/10/92 8:52 pm ID/Status Prospect
1/10/92 9:00 am To-do Not Done Get prices from catalog
Show Public
Add Attachment...
Update...
Remove...

Your contact's history is just a menu option away. This is useful for recalling conversations, documents (attachments) and dates.



Once you've logged your phone calls and meetings, noted down what you need to do next and how long it will take, *Act!* will plan your schedule.

list, say – and estimate how long this will take you at the same time. This will get entered in your personal schedule, and it overcomes the weakness of many personal organisers – that they encourage you to type in millions of tasks you haven't got a hope of completing within your lifetime. *Act!* will also warn you of any double-booking, which is a further safeguard against any rash promises you might make.

You can also time your activities. This is a sobering experience for those who often find there aren't enough hours in the day. Timings can be stored as part of the contact history, which is useful if you need to do time-billing. And there's plenty of scope for those who like fiddling with macros – you can create your own shortcuts and add them as icons to the toolbar.

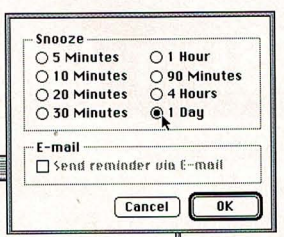
There's always a 'but'...

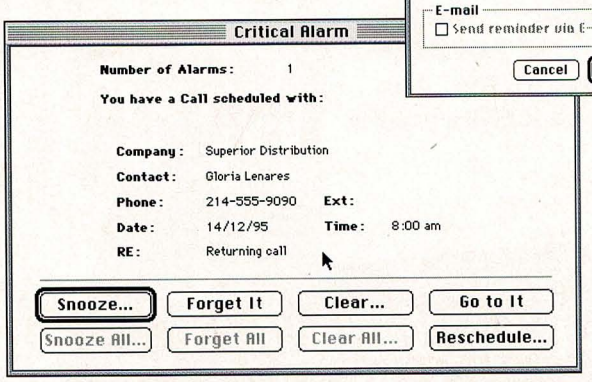
In fact, there are far too many useful features in *Act!* to list them all here. Anyway, useful or not, these features may – depending on your own needs – be outweighed by the limitations. You see, *Act!* is only a contact manager. It can't double as a personal organiser (unless your whole life is spent dealing with other people). You can't put an appointment in your schedule to walk the dog unless you've previously added the dog as one of your contacts.

It's also not going to suit you if you organise your work around projects rather than people. This could be a serious stumbling block – after all, commerce is primarily about seeing through a project or a plan – people are just instrumental. There's a good argument for project, rather than contact, management, even in sales. People come and go, but you still want to sell product X to company Y...

As a contact manager, it's hard to see how *Act!* could be improved. But its approach is so inflexible that it could end up the perfect tool for something that's not quite what you want to do. There's another problem too, one that affects all personal/management organisation software – it requires its users to update their records conscientiously, and to adapt their own methods to the way the software works.

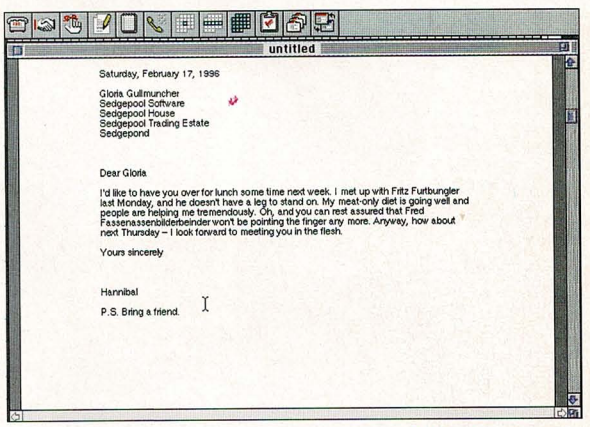
Nevertheless, if your work revolves around making and maintaining business contacts – specifically in sales and marketing – you should take the time to look long and hard look at *Act!*. It handles the complexities of follow-up calls, reports, meetings and to-do's superbly. At the very least it will stop you forgetting important numbers or appointments, and at best it could double your work capacity and your reliability simultaneously. **MF**





When an alarm goes off, you can use the Snooze option to choose the delay before you're reminded again. Why does it stop at one day, though?

There's no shortage of options when an alarm goes off. Do we snooze? (Well, 11 pints of Boddingtons at lunchtime does make you unaccountably tired.) Nah! – we reschedule – Gloria can wait till another day.


untitled
Saturday, February 17, 1996
Gloria Guilmuncher
Sedgepool Software
Sedgepool House
Sedgepool Trading Estate
Sedgepond
Dear Gloria
I'd like to have you over for lunch some time next week. I met up with Fritz Furtbungler last Monday, and he doesn't have a leg to stand on. My meat-only diet is going well and people are helping me tremendously. Oh, and you can rest assured that Fred Fassenassenpfeffereinder won't be pointing the finger any more. Anyway, how about next Thursday – I look forward to meeting you in the flesh.
Yours sincerely
Hannibal
P.S. Bring a friend.

Act! has its own built-in word processor – it links to the current contact record to automatically insert their name and address. An alternative is to use your own word processor and attach the file to the contact's 'history'.

ACT! 2.5

Price: £199. **Out:** now.
Requires: Any colour Mac, System 7.0 or later, 2Mb free RAM.
Contact: Symantec on 01628 592320.

FEATURES 90%
It does everything you could want. But note: it's a contact manager only – not a time, project or life manager.

EASE OF USE 83%
Given the complex inter-related functions, it's about as easy to figure out as it could be.

DOCUMENTATION 95%
A model for everyone else. Thick, detailed, friendly and with quality production and binding.

VALUE FOR MONEY 80%
Excellent as a 'corporate buy' for sales teams. Good for individuals too, provided it's exactly what they need.

MACFORMAT RATING 86%

You'd be MAD to miss it

TOTAL FOOTBALL

The ultimate fans' mag

"We are all to be indebted to *Total Football* magazine for unearthing the most important piece of news in British football this month..."
Jim White, The Independent

AS ANYTHING
"I try to take each bear to the ground"
"The quality of football can be disappointing"
"I get a lot of feedback from the boys"
"I realised that I had a mouth full of yuk!"
"I rub Tiger Balm into his injured areas"

"National gratitude is due to the magazine *Total Football*..."
The Daily Telegraph

Read the stories that really matter FIRST in *Total Football*.

In this issue: Mad fans, Trevor Sinclair, David Elleray, Oasis, Gazza, Lee Chapman, Stuart Hall, Jim And The Doc, Joe Royle and Harry Redknapp, The Pope, Alan Green, black players and loads more stuff like gnomes and shower gel and books.

"There's something deeply sad but also utterly uplifting about a feature in this month's *Total Football*..."
Alan Fraser, Daily Mirror

Total Football Issue 7 on sale NOW!

PLUS
Free with this issue, *Football Italia* magazine worth £2.50!

http://www.futurenet.co.uk/outdoors/totalfootball.html

Cinemania 96

Everyone knows *Encarta*, but *Cinemania* is the other jewel in Microsoft's multimedia crown. Does it still shine bright in 1996, or is the lustre starting to fade?

Congratulations! You've come up trumps on the National Lottery and, as of five minutes ago, you're 30 quid better off than you were this morning. But on what to blow these charity-tastic earnings? As a dedicated film buff, you have but two options...

You could take yourself and your partner off to see *From Dusk Till Dawn* (around £8), munch a bag of Butterkist (couple of quid), buy that *Ed Wood* video you've been wanting (£10.99), pick up last year's *Halliwell's Film Guide* in the bargain book shop (about a fiver), and still have enough left over for a bottle of Chardonnay with which to wash down Tim Burton's affectionate biopic... or you could buy Microsoft's *Cinemania 96*.

Not fair

Not really fair, was it? Pitting a poor, defenceless CD-ROM against the heady whirl of guts and guzzling described above. But isn't that what counts, back in the real world? Multimedia might be finally coming down in price, but until the costs are comparable with, say, the audio CD, John and Jenny Punter still have to cough up the difference. The facts are very simple: the prices are too high. The prosecution rests its case.

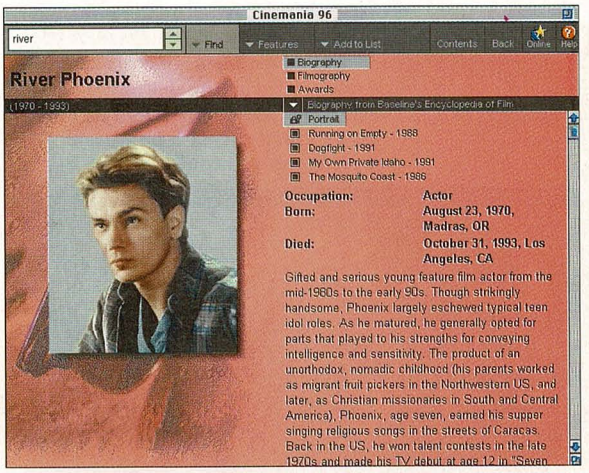
But as this is a fair trial, let's hear from the defence. 'A movie fan's dream', 'entertaining and useful', 'a class act'... It's a trumpet Microsoft has earned from prior releases of *Cinemania*, and one that deserves to be blown long and loud. Compare this lavish production to the zillion other Mac movie guides, and there's no doubt Uncle Bill's baby is the very best there is – fact. From its bottomless pit of facts and figures to the exemplary cast of reviewers, *Cinemania* sports class on its lapels from the minute the icon pops up on your Desktop.

Somehow managing to rate and review over 20,000 movies, all painstakingly cross-referenced to biographies, video clips and bursts of movie soundtrack, *Cinemania 96* is an impressive beast in terms of sheer multimedia trickery – one minute you're putting its knowledge of Soviet art cinema to the test, the next Obi Wan Kenobi has crumpled into nothingness on the flight deck of the Death Star. Of course, all of this brazen flashiness means squat unless the interface is of the user-friendly variety. Thankfully, Microsoft hasn't let Hollywood down. It's both colourful and clear, navigation is quick and easy and, for the celluloid novice, the Cinemania Suggests option will recommend a suitable flick depending on your mood. This is a touch frivolous, and you'll use it approximately twice, but if this is the quality of the afterthoughts, then you know you're on to a winner.

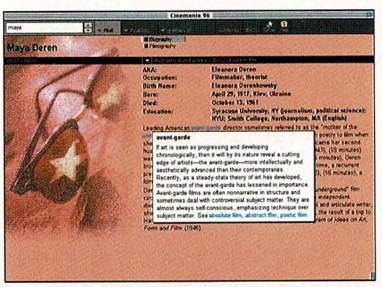
Oh go on then

So is it worth it? It's a tenner cheaper than *Cinemania 95*, crammed with all the latest makers and shakers and, if you and your Mac are modemed up, updatable for free over the World Wide Web. Of course, only the most ardent film buff is going to replace last year's cinematic banger with this year's model, but for the first time buyer, *Cinemania 96* is the choice to make – with reservations. £30 is still £30 and, unfortunately, your lucky numbers aren't going to roll down that perspex tube every week. If money's no problem, then buy it without hesitation. If it is, then welcome to the cheap seats.

MIKE GOLDSMITH


Cinemania 96
river
Find
Features
Add to List
Contents
Back
Online
Help
River Phoenix
(1970 - 1993)
Biography
Filmography
Awards
Biography from Baseline's Encyclopedia of Film
Portrait
Running on Empty - 1988
Dogfight - 1991
My Own Private Idaho - 1991
The Mosquito Coast - 1986
Occupation: Actor
Born: August 23, 1970, Madras, OR
Died: October 31, 1993, Los Angeles, CA
Gifted and serious young feature film actor from the mid-1980s to the early 90s. Though strikingly handsome, Phoenix largely eschewed typical teen idol roles. As he matured, he generally opted for parts that played to his strengths for conveying intelligence and sensitivity. The product of an unorthodox, nomadic childhood (his parents worked as migrant fruit pickers in the Northwestern US, and later, as Christian missionaries in South and Central America), Phoenix, age seven, earned his supper singing religious songs in the streets of Caracas. Back in the US, he won talent contests in the late 1970s and made his TV debut at age 12 in "Seven

Comprehensive in the extreme, *Cinemania 96* includes up to date info on the likes of the late River Phoenix.



Even the likes of avant-garde pioneer Maya Deren are featured in this comprehensive listing.

Fancy a weepie? Select your option or just let *Cinemania* choose a category for you.

MICROSOFT CINEMANIA 96

Price: £29.99. **Out:** now.
Requires: LC or better, 8Mb of RAM, System 7 or later, 256-colour, 13-inch monitor, CD-ROM drive (double-speed or faster recommended).
Note: For *Cinemania* monthly updates, you will require: a modem, Internet access and, to download all 12 monthly update files, 6Mb of hard disk space.
Contact: Microsoft on 0345 002000.

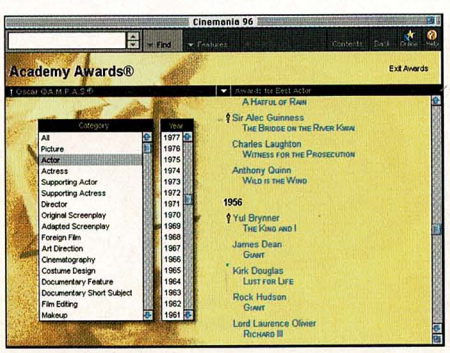
MACFORMAT RATING 89%

PAULINE KAEL

Former critic for the *New Yorker* and National Book Award winner, Pauline Kael's opinionated views feature on over 2,800 of *Cinemania's* reports.

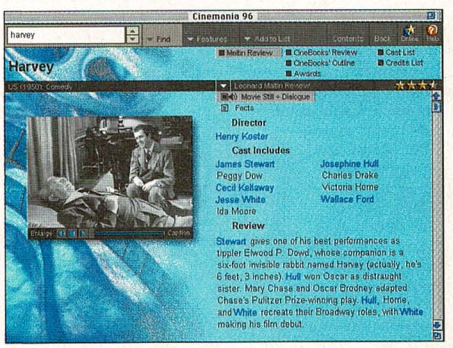
LEONARD MALTIN

Resident film buff for the American show *Entertainment Tonight*, Leonard Maltin contributes over 20,000 reviews to *Cinemania 96* from his *Movie & Video Guide 1996*.



Start arguments the easy way – call up the history of the Academy Awards. Yul Brynner? Couldn't act his way out...

If you're a film buff, get online, and then you can download monthly updates of all the latest movie information for free.

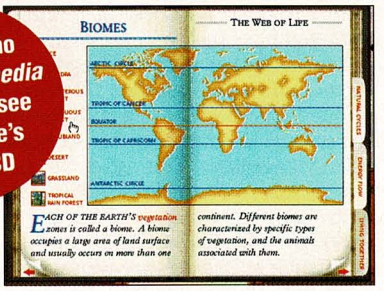


All the films listed come not only with a variety of reviews, but with a wide range of quality stills and dialogue clips.

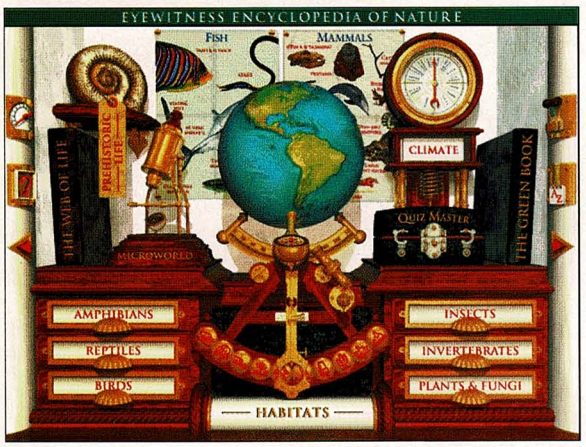
Encyclopedia of Nature

It claims to bring the natural world to life in your sitting room, but does this 'essential multimedia reference guide' cover the field?

For a demo of *Encyclopedia of Nature* see this issue's Cover CD


BIOMES
THE WEB OF LIFE
ARCTIC CIRCLE
TROPIC OF CANCER
EQUATOR
TROPIC OF CAPRICORN
ANTARCTIC CIRCLE
DESERT
GRASSLAND
TROPICAL RAIN FOREST
EACH OF THE EARTH'S vegetation zones is called a biome. A biome occupies a large area of land surface and usually occurs on more than one continent. Different biomes are characterized by specific types of vegetation, and the animals associated with them.
NATURAL CYCLES
ENERGY FLOW
LIVING TOGETHER

The Web of Life attempts to explain the whole picture – habitats, climates and species.



The rather quaint design of *Encyclopedia of Nature's* opening screen is both easy to use and fun.

You can't deny the polished beauty of *Eyewitness Encyclopedia of Nature*. Sound and visuals are delicately balanced in an enticing package that delivers exactly what it promises: everything you could want to know about the animal and plant kingdoms. Addressing such a massive subject, the creators have sensibly chosen to exclude human biology and have carefully categorised the rest. Mammals, amphibians, invertebrates, plants and fungi... all get their own special section.

But neither is the larger, global context ignored. The Web of Life and The Green Book deal with ecosystems, biospheres, food chains, environmental issues – the lot. Prehistoric life is covered in the generally accepted Darwinian fashion, while climates and habitats are comprehensively handled. And, of course, all the information is linked to other details that could possibly be relevant, in classic CD-ROM style. No loopholes here.

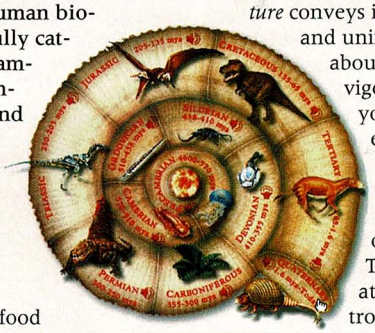
It's simple to navigate, and exploring *Nature* is an adventure and a visual feast. But if you're in a hurry, an A to Z index supplies the goods pronto. And with more illustrations than photos, and more animated diagrams than QuickTime movies, access times are kept to a minimum – no need to take a nap while you wait for the necessary info to appear on screen. Feeling lazy? Many sections provide a soundtrack as well as text – you can sit back and listen to a soothing narration.

Unfortunately, *Nature* is undeniably American. 'Fungi' is pronounced like 'bungy', 'niche' sounds like 'nitch' and 'autumn' is now 'fall'. Another niggle is that while it's easy to find what you want, to get back to where you were ten minutes ago you have to endlessly click the Backtrack button and watch every single screen limp by. How about a bookmarking system?

More importantly, in its effort to sound authoritative and objective, *Nature* conveys information in a dry and uninviting style. How about language that invigorates and involves you? For example, environmental issues are given their due, but there's no sense of urgency, tragedy or imminent disaster. This is important, pay attention, stop destroying your planet!

The language is as limp as a 1970s school history book. This detracts from the immense effort that has gone into the visual presentation, where links abound and fantastic sound effects accompany the wildlife.

Photos have a minority presence in *Nature*. The use of drawings instead keeps access time down.



A brief history of time. Find out what happened between the Big Bang and us.

The lack of in-depth information is a further concern. It's impossible to convey everything that everyone might want to know. Because of this, *Nature* skims expertly over the surface of everything, and you depart with nothing more than a reasonable general knowledge. It certainly contains less in-depth information than the universally acclaimed Microsoft *Encarta*. In the effort to make the whole package presentable, polished and pretty, minimal text has been provided, just in case it overtaxes your attention span.

Eyewitness Encyclopedia of Nature offers most of what you'd expect from a paper encyclopaedia, plus all the benefits of CD-ROM and, as such, it is excellent – but it is still only an encyclopaedia. CDs are proving their superiority over paper for the encyclopaedia, but there is too much emulation of the original medium. Depart from the dry style. Give it some flair. Make everyone enjoy learning!

EVA LAUER

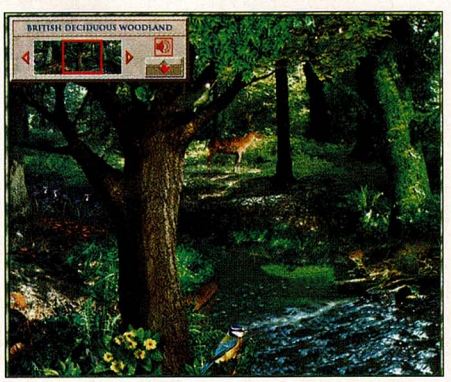
ENCYCLOPEDIA OF NATURE

Price: £39.99. **Out:** now.
Requires: LCII or higher, 6Mb of RAM (8Mb recommended), System 7 or later, 13-inch colour monitor, double-speed CD-ROM drive.
Contact: Dorling Kindersley on 0171 753 3488.

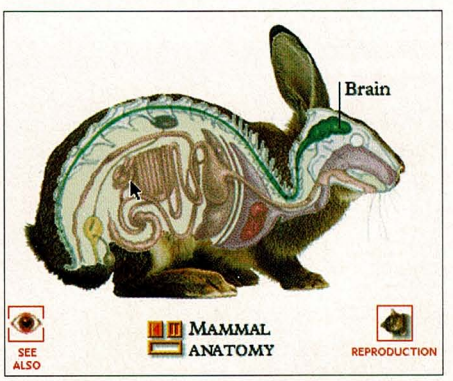
MACFORMAT RATING 85%

Green Frog
THIS COMMON waterside animal may be brown, bronze, or green in color. Adult green frogs are truly amphibious, spending as much time in water as they do on land. Like most frogs, they will eat any live food they can manage to swallow. The green frog's call is an explosive noise said to resemble the sound made when a loose banjo string is plucked.
GREEN FROG
External eardrum
Bulging eyes
Wide mouth
GO TO
KEY FACTS
FROGS AND TOADS

The sound effects are excellent and every screen provides a range of links to other relevant or interesting topics.



Listen to the woodland rustlings, explore the habitat and discover its inhabitants. You could almost be there...



A fluffy bunny's innards are explained in brief with the assistance of a soundtrack and animated diagram.

Grolier Science Fiction Encyclopedia

Novels, films, TV and general themes, this latest encyclopaedia boldly goes where no other CD has gone before – to examine science fiction, past and present.

Science fiction is big business. After years spent in the forgotten corners of student bedsits, the spaced out plots of contemporary SF have finally escaped the world's bargain bins and entered the mainstream market.

Science fiction is everywhere. The Internet is full to its cyber gills with *Star Trek* sound samples, computer games are being overrun with aliens and even Hollywood is sinking its dollars into visions of the future. Now Grolier is getting in on the act too with its very own science fiction encyclopaedia. And with QuickTime movie clips, soundbites and a host of rare pictures and posters, the *Grolier Science Fiction Encyclopedia* has the makings of a CD that'll be out of this world, with cash-creating potential to match.

So, is it time to cast off your anorak of nerdism and rejoice? Not quite. You see, like a nervous Han Solo, Grolier's romp into the world of science fiction simply fails to deliver the goods. The interface – which forms a backdrop to all the CD's various sections – looks like a montage of soggy paper tissues, and although it's inoffensive, it's also uninspiring, especially to hard-core special effects freaks.

Navigating the encyclopedia's 6,000 plus entries is enough to give your average space cadet a major headache, too. The CD's contents are split into five sections: Time Machine, Gallery, Book Browser, Themes and Archives. Unfortunately, while these sections are clearly labelled on the main screens, the contents page that initially greets you splits the Themes section into subcategories – Lifeforms, Time, Space and so on – which is enough to confuse the hell out of rookies.

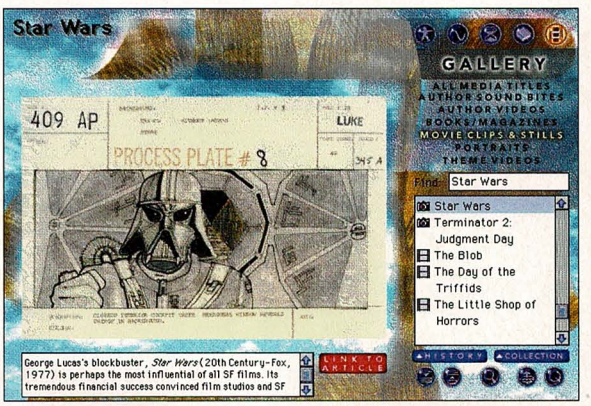
And talking of confusion, who came up with the search facilities here? The ever-present Word Search delivers an alphabetical selection of entries whose text contains your chosen words, but it makes no attempt to put into priority the entries that are devoted to your chosen subject, as opposed to those which simply mention it in passing.

The Speed Search works much better. It skips through the topics by title, often hitting your desired subject before you finish entering all the letters. Unfortunately, it's also far too useful to find its way into every section, and is subsequently limited to the Archive, Gallery and Themes areas.

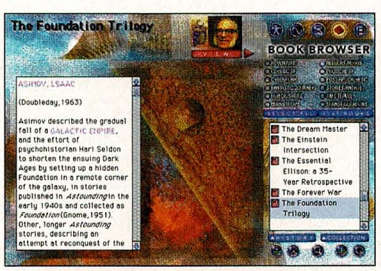
It's not all bad, though. The content, which is based on Peter Nicholls and John Clutes' highly respected *Encyclopedia of Science Fiction*, is excellent. And unlike Grolier's other US-centric offerings, this one has plenty to grab UK users. *Doctor Who*, *The Prisoner* and *Red Dwarf* are all in there – even the staunchly British *Captain Scarlet* gets a mention. What's more, it's all bang up to date, with films as recent as *Star Trek Generations* and *Stargate* edging their way in. Sadly, the same can't be said for the movie clips, which seem to predate the introduction of Technicolor. Classics? Yes. Modern? No.

Still, while it may not be bursting with face-hugging alien action, the accuracy and variety of information on offer will keep fans of the genre clicking for hours. It's just a shame that the interface has all the panache of an Ed Wood home movie. Ultimately, this is one for the UFOs – Understanding Fans Only.

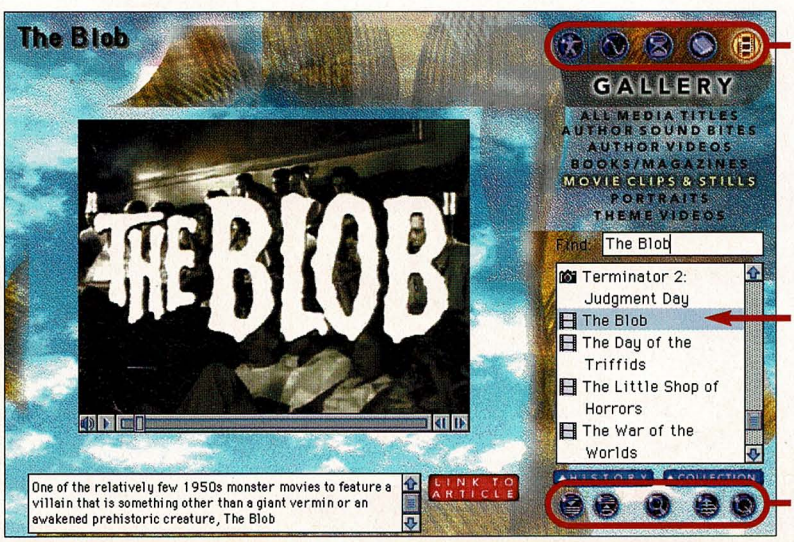
KAREN LEVELL



'Aren't you a little short for a stormtrooper?' Original drawings, like this one of Luke Skywalker's stormtrooper outfit, help to make the CD feel that bit special.


The Foundation Trilogy
BOOK BROWSER
ASIMOV, ISAAC
(Doubleday, 1963)
Asimov described the gradual fall of a GALACTIC EMPIRE, and the effort of psychohistorian Hari Seldon to shorten the ensuing Dark Ages by setting up a hidden Foundation in a remote corner of the galaxy, in stories published in Astounding in the early 1940s and collected as Foundation (Gnome, 1951). Other, longer Astounding stories, describing an attempt at reconquest of the
The Dream Master
The Einstein Intersection
The Essential Ellison: a 35-Year Retrospective
The Forever War
The Foundation Trilogy
HISTORY
COLLECTION

The Book Browser enables you to scrutinise the plots of over 300 novels according to themes, awards, and so on. Of course, you can't simply click on the subject of your choice – instead you have to deselect the other 11 categories.



The main interface.
Left to right:
Go to Archives (all articles).
Got to Themes.
Go to Time Travel (timeline of landmarks in SF).
Go to Book Browser.
Go to Gallery (all multimedia items).

Click here to choose the item you want to view.

Left to right:
Add to and open collection (bookmarks).
Word search.
Go to features screen.
Quit

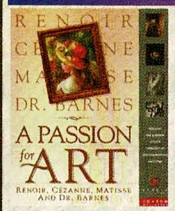
GROLIER SF

Price: £44.99. **Out:** now.
Requires: LCIII or better, System 7.1 or later, 3.5Mb of free RAM, 6Mb of free hard disk space, colour monitor, double-speed CD-ROM drive.
Contact: Grolier Interactive 0181 600 6023.

MACFORMAT RATING **69%**

EMERALD Creative Technology

REFERENCE



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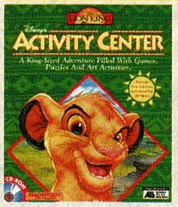

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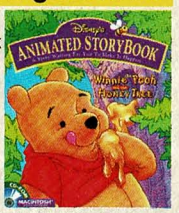

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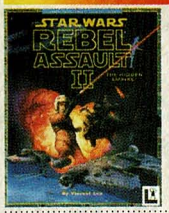

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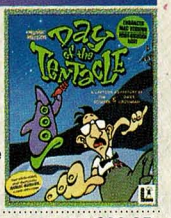

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Napoleon: Europe and the Empire

Despite being short and possessing just the one arm, Bonaparte cast a giant shadow on European history. Years later, can he do the same on CD-ROM?

Who is Napoleon Bonaparte exactly? We all remember his name from in between the cat-naps in history lessons, but just how did this diminutive Frenchman become one of the most famous people who ever lived? With this dilemma in mind comes *Napoleon: Europe and the Empire*, a sprawling documentary of the man's life, love and times. The myths that surround the fearsome general are about to be exploded once and for all.

Featuring two and a half hours of animation and commentary, 800 pages of text and 350 images, this classily packaged CD-ROM provides an extensive history. Tracing the Frenchman's life from childhood to bleak exile, you get a panoramic view not only of Napoleon, but of the era he came from. Much of this involves art, and it is here that this document comes into its own.

Artworks are linked into all areas of the story, flavouring its progression and helping you understand the motives behind the actions. The paintings enable you to visualise the period in a manner that a BBC costume drama could only hint at. These are huge, towering masterpieces, ranging in subject matter from nude studies to full-blown battle scenes, complete with apocalyptic skies and blood-strewn faces. One drag of the mouse means that you can magnify detail and study any area of the painting at will. This CD is even more user-friendly than the magnificent *A Passion for Art*.

Unfortunately, where the artistic side of this historical lesson shines, everything else tends to pale in comparison. Reams and reams of text scroll by uninvitingly, the animations are often static and incidental, and the commentary – which is aided by sound effects throughout – flashes past your ears a little too quickly for comfort. When you consider that Napoleon's reign lasted only 15 years, you begin to realise that *Napoleon: Europe and Empire* is, in fact, a history of the Napoleonic era, and not solely an attempt to explore the man, the myth and the legend. Unless you are already familiar with these times, it does feel a little disjointed. Often you are left unsure whether it is supposed to be an art lesson, a military document or a simple tale of political power that bred insanity. As a product, it verges on over-ambitious and is certainly riddled with inconsistencies.

Despite its problems, this is still a sophisticated biography with deeply-layered sections, linked by a stylish – though not entirely straightforward – interface, and a massive search database. If something or someone moved, breathed or touched historical events at the turn of the 18th Century, you can be sure to find reference to them here, rich in colour and expertly brought to life.

As a socio-political and cultural CD-ROM, *Napoleon* is a glossy triumph of production, but as a historical encyclopaedia it only partly succeeds. Because of this, it's best recommended either to students of French history or to anyone who has an unhealthy fascination with short, unruly, one-armed dictators.

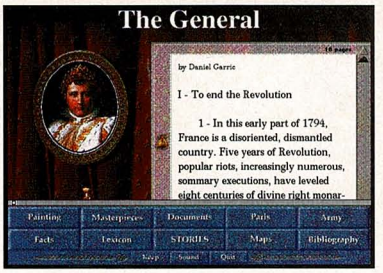
GIL GILLESPIE

CLASSIC ART

A Passion for Art, the comprehensive study of Impressionism from Corbis, scored 90% and a Classic award when it was reviewed in MACFORMAT 30 (if you missed it, see page 117). It costs £49.99. For further details contact Corbis on 0171 278 1387.

IT'S A CLASSIC

Napoleon was the original king of the sound-bite, his classic lines handy for almost every occasion. Pronouncements such as 'Anarchy inevitably leads us back to absolutism' are littered throughout the story.



The interface achieves the perfect Napoleonic atmosphere, with a dashing portrait and use of shadow providing an air of significance.

The sky turns black in just one of the many portraits of famous Napoleonic battle scenes. This is *Raft of the Medusa* by Géricault.

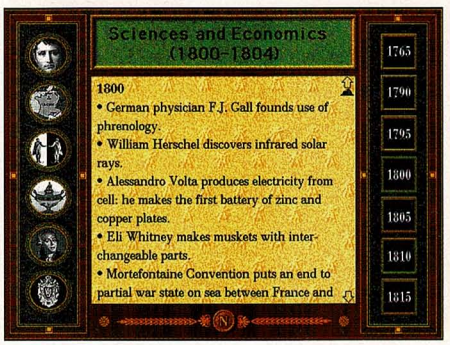
The French Campaign by Meissonier is an eerie, breathtaking study of Napoleon going into battle. Its use of light is truly striking.

NAPOLEON: THE EMPIRE

Price: £39.99. **Out:** now.
Requires: LC475 or better, 8Mb of free RAM, System 7.1 or later, 256-colour, 13-inch monitor, double-speed CD-ROM drive.
Contact: Infogrames on 0171 738 8199.

MACFORMAT RATING 72%

Get orf my land! Europe 200 years ago. Napoleon was running riot, conquering almost everywhere on this map.


Sciences and Economics
(1800-1804)
1800
• German physician F.J. Gall founds use of phrenology.
• William Herschel discovers infrared solar rays.
• Alessandro Volta produces electricity from cell: he makes the first battery of zinc and copper plates.
• Eli Whitney makes muskets with interchangeable parts.
• Mortefontaine Convention puts an end to partial war state on sea between France and
1765
1790
1795
1800
1805
1810
1815

We know you can't separate the man from the time. But really, is all of this much detail really necessary?

International music happening of the moment – Ludvig Van Beethoven still had to carry his own baskets.

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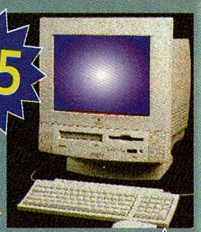

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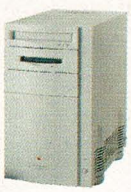

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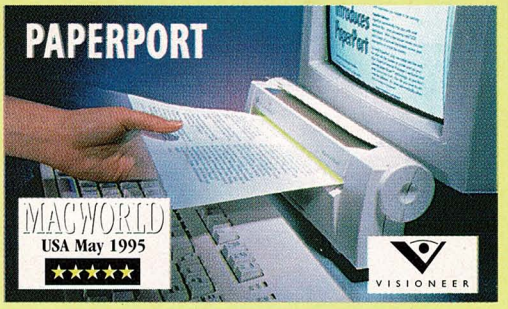

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Fortress of Louisbourg

For Canadians, this is their Waterloo – a battleground that helped to shape the nation. For anyone else, it's an extremely unlikely subject. A case of import hell?

For anyone unfamiliar with Canadian history, the Fortress of Louisbourg is an 18th Century French citadel on the east coast of the country that gave us maple leaves, *Due South* and Bryan Adams. It was the setting for two almighty battles between the French, the British and the New Englanders, all desperate for a slice of the kingdom.

Containing a massive album of photographs, 40 minutes of video and some of the most irritating music you've ever heard in your life, *Fortress of Louisbourg* is an exhaustive journey around the life and times of this distant outback, taking in industry, culture and, of course, the brutally primitive battles.

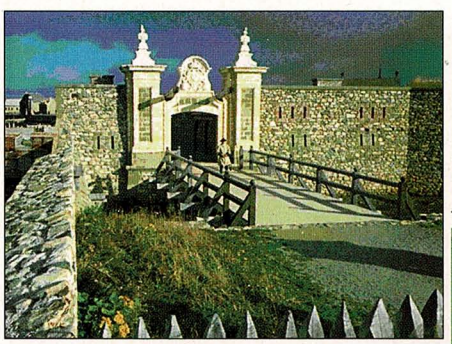
The attention to detail in this production borders on the obsessive. Actors don period costume to set the scene, for example, while military decision-making is laid bare with authentic battle-scene animations. But while the reproduction is exact, *Fortress of Louisbourg* suffers from a distinct lack of image. The photographs are often flat and unexciting, the video's worthy but dull, and your enjoyment of page upon page of text is killed by the suggestion that you must learn it at all costs. Fine for schools in Ontario, fairly pointless for the rest of us. The whole shebang is reminiscent of those dire information films that Geography teachers seemed to cherish. Your eyelids begin to droop, and you stop caring about ever whether you ever hear cannon fire again.

This textbook trawl gives you the facts, but not the feeling of life in this era. Insights into a distant past should always prove irresistible and, while *Louisbourg's* creators have clearly invested half a lifetime here, they still fail to grab your attention. For instance, you can view a cartoon 3D model of the town, examine the unappetising diet of the day and observe the reconstruction of the fortress in the 1960s, but so what? Unfortunately, the subject matter means about as much to the average Earthling as insect reproduction in South Korea.

The question has to be asked: unless you were a homesick Canadian, why would you want to order this CD from overseas? Clearly aware of its sleep-inducing properties, the maker also tags on an irrelevant boat tour of Cape Breton, complete with choppy seas, rugged cliffs and a song that somehow marries Chris De Burgh and Captain Bird's Eye. That this unintentionally comic diversion proves to be the CD's finest moment should leave you in no doubt about its drawbacks.

At over three hours long, this CD certainly offers value for money, but ultimately *Fortress of Louisbourg* proves to be a rather lifeless stroll through someone else's history – multimedia at its most obscure. Come back, Bryan Adams, all is forgiven. **GIL GILLESPIE**

Walls come tumbling down. And then are built up – the Fortress of Louisbourg was restored in the 1960s. Canadians have a history too y'know.



The picture postcard gateway to the town illustrates the need to preserve the Fortress of Louisbourg.

Actors in period dress are used to create an authentic trip into Canada's murky past.

FORTRESS OF LOUISBOURG

Price: Can$54.
Out: now.
Requires: LC or better, 5Mb of RAM, System 7.1 or later, 13-inch colour monitor, double-speed CD-ROM drive.
Contact: Fitzgerald Studio in Canada on 00 1 902 562 2321.

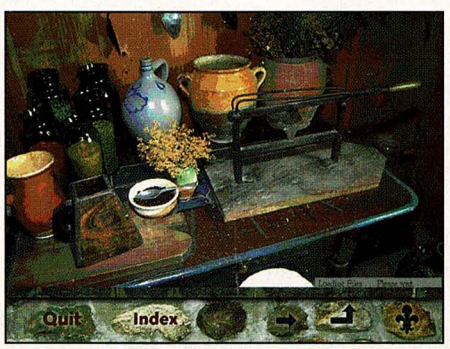
MACFORMAT RATING 35%

LOOK & LEARN

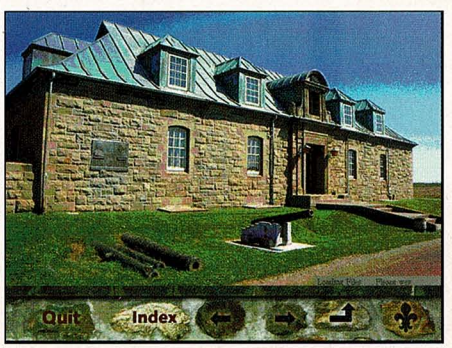
Fortress of Louisbourg has been distributed throughout 5,000 schools across the Ontario region. The educational package, which contains a booklet of teacher's notes, is Can$59.95.

NET SITE

You can take a further look at the project, and at Fitzgerald Studio's forthcoming Alexander Graham Bell CD-ROM, on the Internet. at **http://www.chatsubo.com/louisbourg/home.html**
Look out for the launch of *Alexander Graham Bell*, which will involve schoolchildren from across the globe communicating on the Internet.



The inside of a typical 18th century dwelling complete with one or two ingredients that are way past their sell-by date.



Take a close look at this 18th century dwelling. How many houses do you know that boast cannons on the front lawn?

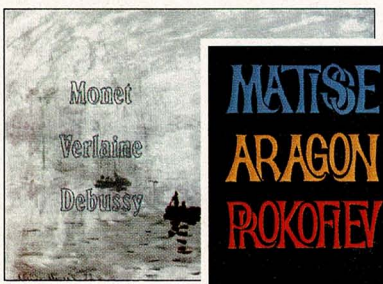
Red sky at night – Canadian's delight. Or maybe it's the aftermath of yet another bloody battle in Louisbourg.

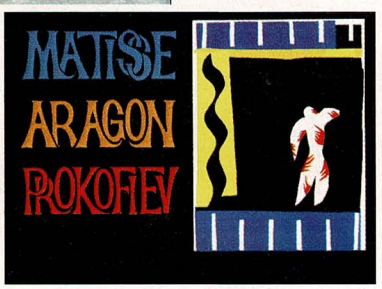
The Triptych collection

A Gentle Revolution and _Battle Against the Shadows_ bring together artists, musicians and poets of two eras. Rachel Harrison gets into the mood of the time.

Putting works of art on to CD-ROM is nothing new, but combining them with music, poetry, and biographies of the artists' lives is a completely different approach.

The Triptych discs blend these three artistic media effortlessly, and are very much 'coffee-table' CDs – pleasant to browse through in a quiet moment.





While the design of the discs is the same, the style is different, showing the contrast between Modernism and Impressionism.

WORKS OF ART

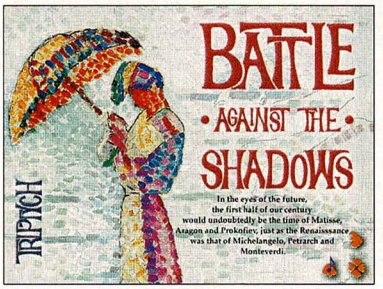
There are some excellent art discs available, two of the best being *A Passion for Art*, priced at £50 (Call Corbis on 0171 278 1387 for more information), and *A Stroll in 20th Century Art*, costing £44.99 (phone Grolier Interactive on 0181 600 6000).

There are currently two discs in the series: *A Gentle Revolution* examines the life and works of the painter, Monet, the poet, Verlaine and the composer, Debussy, and *Battle Against the Shadows* focuses on Matisse, Aragon and Prokofiev in a similar way.

Having selected a chapter, you can choose its musical accompaniment. You are then offered a collection of paintings, photographs, text and narration. Sometimes this is about the artists, sometimes it takes the form of poems. While the basic method of finding your way around each disc is the same, the style of the pages reflects the difference between the Impressionist movement and the harsher realities of modern masterpieces. The introduction explains the connection between the three types of artist, and is crucial in understanding the title.

In *A Gentle Revolution*, Monet, Verlaine and Debussy are described as being the minds behind the Impressionist revolution. 'All three men came from modest backgrounds, and were denied the right of the more privileged classes to control taste and artistic activities – as gentle as their revolution may have been, their aspirations were akin to those of all revolutionaries.'

Battle Against the Shadows stars Matisse, Aragon and Prokofiev, who all lived through a time of war and rebellion. This influenced their work, which, according to the disc, was 'a declaration of light' in a dark world – a battle against the shadows.


TRIPTYCH
BATTLE
• AGAINST THE •
SHADOWS
In the eyes of the future, the first half of our century would undoubtedly be the time of Matisse, Aragon and Prokofiev, just as the Renaissance was that of Michelangelo, Petrarch and Monteverdi.

The Introduction of these two discs explains the connection between the artists covered, and sheds some light on the titles.

Close encounters

Once you've grasped the gist of the relationships between the creative talents, you can move on to the main section. The Encounters component contains biographies of the artist, poet and composer. It's broken into chapters, covering important people and places – Verlaine's story, for example, includes his homosexual affair with Rimbaud, and the time he spent in prison after threatening his lover with a pistol. These biographies are delivered as paragraphs of text, or as irritating scroll-down windows, although occasional links to relevant subjects appear at the side of the screen.

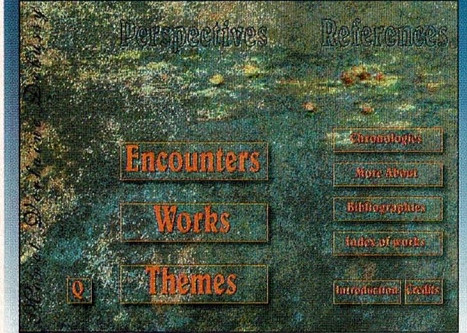
The Works section has three main divisions: Virtual Museum, Anthology and Imaginary Concert, alongside some additional sections. Virtual Museum doesn't live up to the name – it's just a slide show of paintings, accompanied by captions. There are no links to other sections explaining the influences behind the artwork – you might as well just flip through a catalogue of paintings. The other Works sections are better. Anthology divides the poetry into different collections – choose a poem and you can read it, listen to a recitation, and read notes about it. The backgrounds chosen for each poem are suitably minimalistic.

In Imaginary Concert you are presented with a variety of music, from opera and ballet to piano and quartets. You can read about the music while listening to it and read biographies of the performers and conductors. On *A Gentle Revolution* you even get the chance to Debussy playing the piano.

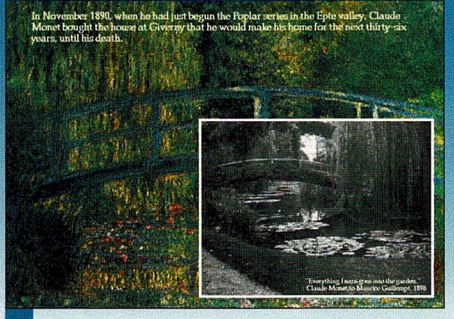
In addition to these overviews, there are also snippets about how the individual artists work. For example, you can learn about Monet's use of brushwork, read Verlaine's *Fuddled Song* – an ironic reply of the poet to a critic, or read about *A Broken Melody*, which chronicles the influences behind Prokofiev's music. These sections are great, but would be more useful if you could jump to them from a painting, poem or piece of music and read

A PICTURE TELLS A THOUSAND WORDS...

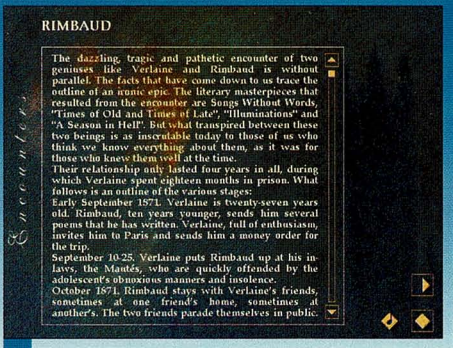
A Gentle Revolution would be a great thing to watch on a dreary Sunday afternoon when there's nothing on the TV. It's certainly cheaper than traipsing to London to visit an art gallery, a concert and a poetry recital...



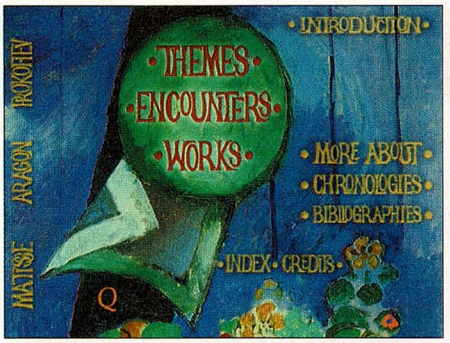
1 From the main screen you can look at details of the artists' lives, their individual masterpieces, or a slide show incorporating the work of all three of them.


In November 1890, when he had just begun the Poplar series in the Epte valley, Claude Monet bought the house at Giverny that he would make his home for the next thirty-six years, until his death.

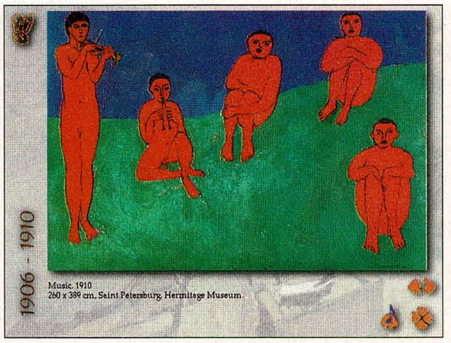
2 Let's look at Monet. This is the part of the section on his life, regarding his home at Giverny and the famous Japanese bridge. It's accompanied by Debussy's *Arabesque in G major.*


RIMBAUD
The dazzling, tragic and pathetic encounter of two geniuses like Verlaine and Rimbaud is without parallel. The facts that have come down to us trace the outline of an ironic epic. The literary masterpieces that resulted from the encounter are Songs Without Words, "Times of Old and Times of Late", "Illuminations" and "A Season in Hell". But what transpired between these two beings is as inscrutable today to those of us who think we know everything about them, as it was for those who knew them well at the time.
Their relationship only lasted four years in all, during which Verlaine spent eighteen months in prison. What follows is an outline of the various stages:
Early September 1871. Verlaine is twenty-seven years old. Rimbaud, ten years younger, sends him several poems that he has written. Verlaine, full of enthusiasm, invites him to Paris and sends him a money order for the trip.
September 10-25. Verlaine puts Rimbaud up at his in-laws, the Mautés, who are quickly offended by the adolescent's obnoxious manners and insolence.
October 1871. Rimbaud stays with Verlaine's friends, sometimes at one friend's home, sometimes at another's. The two friends parade themselves in public.

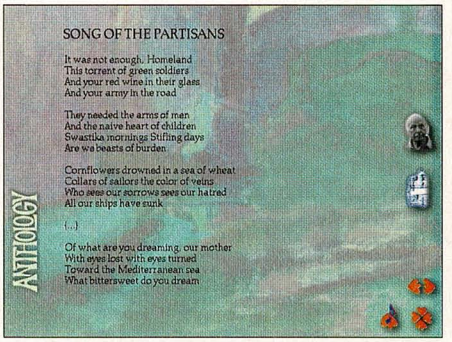
3 Monet's quite well known, but if you don't know much about Paul Verlaine, it's time to fill in the gaps. The section on his life includes entries on his time in prison, his relationship with his wife Mathilde, and here, his affair with Rimbaud, ten years his junior.



To get you in the mood of Matisse, the main screen on this artist's disc uses the kinds of bright blues, yellows and greens his paintings are famous for.



While Matisse was happy to paint naked women without embarrassment, you'll notice that this group of men, found in the 'virtual museum', are most discreetly posed.


SONG OF THE PARTISANS
It was not enough. Homeland
This torrent of green soldiers
And your red wine in their glass
And your army in the road
They needed the arms of men
And the naive heart of children
Swastika mornings Stifling days
Are we beasts of burden
Cornflowers drowned in a sea of wheat
Collars of sailors the color of veins
Who sees our sorrows sees our hatred
All our ships have sunk
(...)
Of what are you dreaming, our mother
With eyes lost with eyes turned
Toward the Mediterranean sea
What bittersweet do you dream
ANTHOLOGY

Many of Aragon's poems were inspired by his wartime experiences. Wars and revolution also profoundly affected the lives of Prokofiev and Matisse.

more about the techniques used and the influences behind them.

Themes

To enjoy the Themes section you've just got to sit back and watch. Despite being passive rather than interactive, these sections are most enjoyable. You choose your topic from a selection that includes Snow, Colours of Time and War and Peace, then watch a slide show which combines paintings, photographs and music.

Matisse's work varied from identifiable figures to surreal shapes and images.

The slide shows themselves are completely different from each other. *Battle Against the Shadows* starts with the rather curious poem *Personne*, which simply keeps repeating the same word. Shuttered windows gradually appear across the screen, building up a real atmosphere. In contrast, War and Peace shows some disturbing war photographs accompanied by a narration explaining how this affected the work of each artist.

Meanwhile, the Impressionist disc is far more gentle – with sleepy music, muted paintings, and haunting poetry – you'd easily doze off if you didn't have to keep clicking the mouse to make it go to the next page. The Themes sections are very uninvolving – they could just be a video – but they are very enjoyable.

To bring things to a close, you can examine a chronology of each artist's life, look at a bibliography and index of works and find out more about them. Included in this section, for example, are Monet's Japanese prints, Debussy's views on Wagner and an imaginary conversation between Matisse and Aragon.

The discs are stylish, and the mixture of fine art and music works well, although the poetry doesn't always blend in so comfortably. Another problem is that sometimes the painting in the background is so distracting that's it's difficult to read the poetry or information that's over the top of it – Monet's pictures are particularly bad for this. White text doesn't work well over his muted colours.

While the presentation is good, a little extra thought could have made it so much better. The topics are heavily pigeon-holed, which means that if you're looking at a particular subject, you can't click on a word and jump to a related subject. Equally, the index of works is a good idea, but it would be far more relevant if you could look up a title and go straight to it. But the discs miss out most because of their failing to make more of the music. It is increasingly common to add audio tracks to multimedia CDs so you can play them on your hi-fi – all you get is a screeching noise with these discs.

These are stylish discs which fail to reach their potential. But, if you're tolerant you'll find them packed with information, even if you do have to search hard to find what you want. **MF**

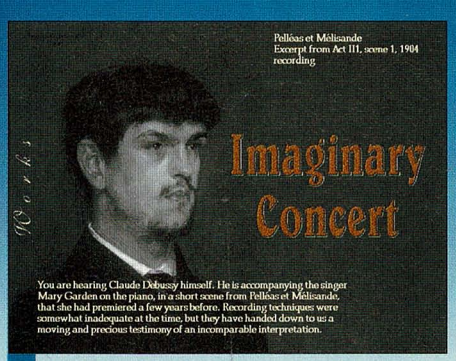
ART OF NOISE

Classical music CD-ROMs are more difficult to obtain, but two good examples include *Mozart: Dissonant Quartet* and the *'So I've Heard...'* range of titles available from Voyager, priced £39.99 (call Astrion on 0181 202 0011). As for poetry discs – well, there's the two mentioned here...

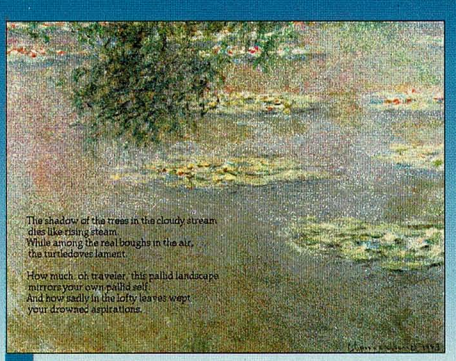
REVOLUTION AND SHADOWS

Price: £24.99 each. **Out:** now.
Requires: LC or better, 4Mb of RAM, System 7.0 or later, 13-inch colour monitor, double-speed CD-ROM drive.
Contact: Ocean on 0161 839 6904.

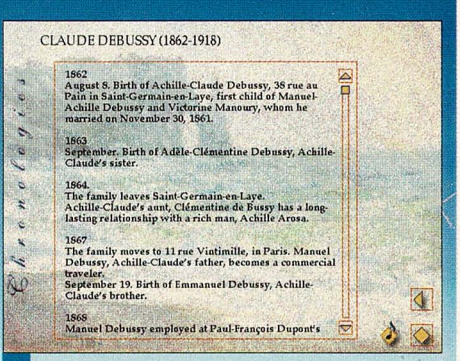
MACFORMAT RATING 68%


Pelléas et Mélisande
Excerpt from Act III, scene 1, 1904 recording
Imaginary Concert
You are hearing Claude Debussy himself. He is accompanying the singer Mary Garden on the piano, in a short scene from Pelléas et Mélisande, that she had premiered a few years before. Recording techniques were somewhat inadequate at the time, but they have handed down to us a moving and precious testimony of an incomparable interpretation.

4 Having heard background music from Debussy, you can choose to concentrate on his life. Here, you can listen to him accompanying singer Mary Garden on the piano. It would be even better if you could play this CD on your sound system and listen to it through hi-fi speakers.


The shadow of the trees in the cloudy stream
dies like rising steam.
While among the real boughs in the air,
the turtledoves lament.
How much, oh traveler, this pallid landscape
mirrors your own pallid self!
And how sadly in the lofty leaves wept
your drowned aspirations.

5 Within the Themes section you are provided with an audio-visual slide show covering six different topics, including snow, the sea, and this one, Colours of Time. It's accompanied by *Suite Bergamasque: Clair de Lune*. A great one to soothe away all that stress.


CLAUDE DEBUSSY (1862-1918)
1862
August 8. Birth of Achille-Claude Debussy, 38 rue au Pain in Saint-Germain-en-Laye, first child of Manuel-Achille Debussy and Victorine Manoury, whom he married on November 30, 1861.
1863
September. Birth of Adèle-Clémentine Debussy, Achille-Claude's sister.
1864.
The family leaves Saint-Germain-en-Laye.
Achille-Claude's aunt, Clémentine de Bussy has a long-lasting relationship with a rich man, Achille Arosa.
1867
The family moves to 11 rue Vintimille, in Paris. Manuel Debussy, Achille-Claude's father, becomes a commercial traveler.
September 19. Birth of Emmanuel Debussy, Achille-Claude's brother.
1868
Manuel Debussy employed at Paul-François Dupont's

6 Why not finish off with a look at the chronology of each artist's life? You can also refer to the bibliography or look at the index of all their works, although you can't jump from the index to actually view the individual masterpieces.

SHAREWARE AND PD

Back from his lonely and prolonged exile, the man they tried to gag, Derek Smith, has returned with his musings on life, shareware, and pucking.

All the shareware featured here and more is on our covermounted CD-ROM

FUTURE RELEASES

This issues' margin notes detail ten soon-to-be-released shareware programs.

LOOKOUT

A sound recognition program that detects the footsteps of the boss, and automatically hides any open game.

LOST THE REMOTE

A PowerBook utility that uses the new infra-red networking facility of the 5300s to change telly channels.

It's been several months since MACFORMAT last let me loose on the unsuspecting world of shareware. But, having settled the many defamation cases left in my wake, they've let me back.

Rod Lawton and Colin *'Blud'* Dalziel have been doing a sterling job since my departure, despite ignoring my golden rule of reviewing shareware: if you don't have something nice to say, say something really insulting. Mind you, I've been very surprised – if not a little disappointed – by the high quality of some of this month's releases.

Air Puck

ARCADE GAME

e-mailware

In the days before we had metric butchers and digital arcade games, the world was a quieter, calmer place. Country villages resounded to the thwack of leather on willow, and seaside resorts echoed to the clatter of plastic on plastic. Yes, air hockey. The game involved two players smashing a puck around a small table, trying to get it into the opposition's goal. Air blew through small holes in the table, giving an almost frictionless playing field. Play was fast, furious and frantic.

The Mac game *Air Puck* is based on this format, except that it's feeble, fatuous and frightful. You play against a computer-controlled opponent – a daunting prospect. I mean, your computer can process thousands upon thousands of calculations a second, manipulate multi-megabyte files in real time, and play the most complex of games. Unfortunately, your Mac will play *Air Puck* like a geriatric hamster, slowly dribbling the puck forwards before half-heartedly pushing it towards you. The only chance the puck has of ending up in your goal is if you put it there yourself.

The author reveals in the Read Me that he has often been beaten by his game. I can only conclude that he is as bad at arcade games as he is at programming. The Read Me also requests that you send him an e-mail telling him what you think of his game. Sadly he forgot to include his e-mail address. Wise move, mate.

Font Box

FONT UTILITY

Shareware, registration fee $29.95

One of my favourite spectator sports at MACFORMAT is watching arty types argue over the merits of the magazine's chosen fonts. 'Gariger Super Medium is much better because the capital M has a higher bridge on the first arch.' 'Rubbish! What about its lower case "l"? The proportions are terrible! Zapf Dangly Compressed is far superior.' And so on... Such deliberations have meant that there are now thousands of commercial and shareware fonts available.

This sort of font promiscuity leads to the constant need for you to install fonts to view documents. Once you're finished, you delete the font, partly from a legal sense of duty, but mainly because they fill up your hard disk and make *QuarkXPress* take five minutes to launch. All of this means that your **Fonts** folder can become a messy wasteland of half discarded or duplicated fonts. This is further complicated by the fact that screen fonts can lurk about and hide in the suitcases of different fonts.

Font Box is a digital cleaning lady that will tidy up your **Fonts** folder and get it back into shape. It roots out duplicated fonts, screen fonts without printer fonts and vice versa. Also, if you're using *ATM (Adobe Type Manager)*, you only need one screen size per font, but deleting the extraneous sizes is a hassle that many people don't bother with. *Font Box* will handle this as well, giving you back precious hard disk space.

Operation is as simple as double-clicking. Then you are asked politely whether you want to delete each type of extraneous font. For font junkies, this program should be a very handy companion.

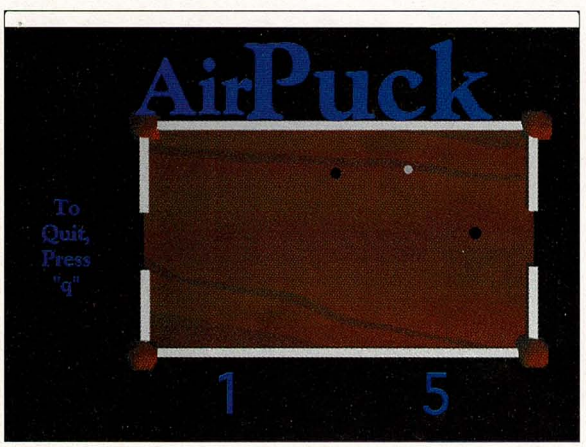
Dome Wars 1.0

ARCADE

Shareware, registration fee $10

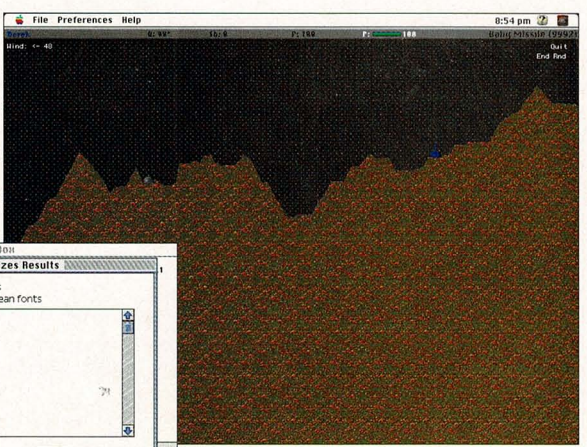
We featured an early version of this game some time ago and it was good then. It's now been completed, and plays even better.

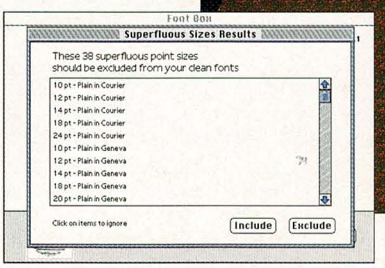
Dome Wars is a traditional tank game, where you choose a trajectory and velocity for your shells, and try to blow up your opponent. You can have up to ten players, any proportion of these being computer or human controlled. This means you can play a straight game against a friend, or play multiple computer controlled opponents. You can also choose the style of play for each player, from the deadly



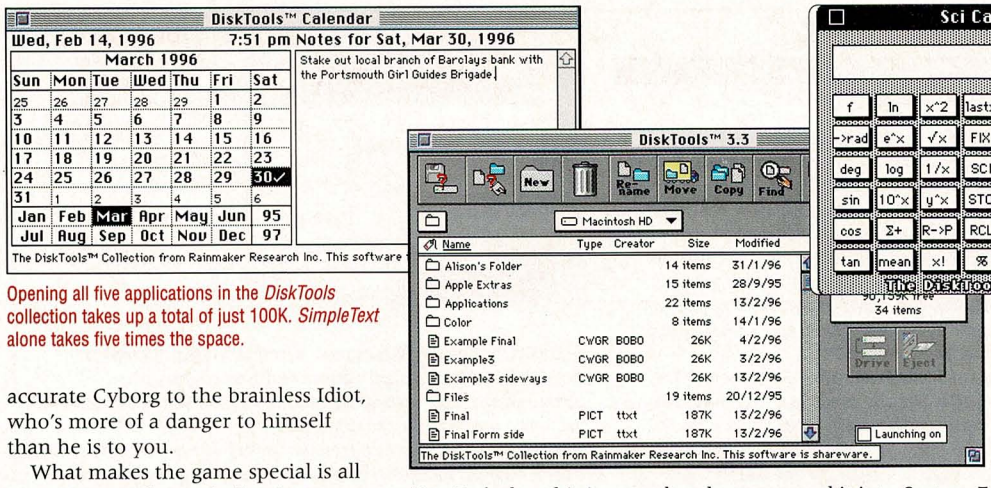
Don't let the poor graphics fool you for a minute, *Air Puck* is a lot worse than it looks. The speed at which that puck travels has to be seen to be believed.

In *Dome Wars* you can spend your hard earned dosh on a defensive shield or a really big gun. Hmm, tricky decision.




Font Box
Superfluous Sizes Results
These 38 superfluous point sizes should be excluded from your clean fonts
10 pt - Plain in Courier
12 pt - Plain in Courier
14 pt - Plain in Courier
18 pt - Plain in Courier
24 pt - Plain in Courier
10 pt - Plain in Geneva
12 pt - Plain in Geneva
14 pt - Plain in Geneva
18 pt - Plain in Geneva
20 pt - Plain in Geneva
Click on items to ignore
Include
Exclude

If you have *ATM* installed you don't need all these screen font sizes. *Font Box* sorts it all out for you.


DiskTools™ Calendar
Wed, Feb 14, 1996
7:51 pm
Notes for Sat, Mar 30, 1996
March 1996
Stake out local branch of Barclays bank with the Portsmouth Girl Guides Brigade
DiskTools™ 3.3
Sci Calculator
34456.34
The DiskTools™ Collection from Rainmaker Research Inc. This software is shareware.

Opening all five applications in the *DiskTools* collection takes up a total of just 100K. *SimpleText* alone takes five times the space.

accurate Cyborg to the brainless Idiot, who's more of a danger to himself than he is to you.

What makes the game special is all its options, such as missiles that bounce off the side of the screen. Winning a game gives you cash which can be spent on bigger bombs, or weapons that can dig holes in the surrounding mountains. You can even invest your money for future use, or devise your own missiles. The game also takes note of your screen size, so people with large monitors have a greater play area, meaning that size does matter. Actually, the whole game is very much like sex. Played by yourself it's enjoyable, but with a large group it's more interactive, albeit difficult to work out who's doing what to whom.

The DiskTools Collection

UTILITIES

Shareware, registration fee $20

Ever heard of this commercial product? Probably not. Although this collection of five utilities has been on the market for almost as long as the Mac, it's never been very popular. It now looks so long in the tooth that the original authors have released it as shareware, hoping to squeeze every last dollar out of it.

Each of these mini applications, designed to be Apple Menu items, requires just 20K of memory. *Calendar* is very cunningly named indeed, because it is actually... a calendar. It also keeps simple notes and appointment details, making it an ideal diary for people who don't get out too much. *Phone Pad* is a replacement for Apple's *Note Pad* program, enabling you to store up to 1,000 pages, instead of *Note Pad's* eight. For anyone who uses the *Note Pad* a lot, this is a good replacement. *DiskTools* is a sort of Finder replacement, offering extra tricks such as the ability to see invisible files. Unfortunately, this was devised in the early days of System software, and although useful then, almost all its features are now part of System 7.

There are also two calculators. One is a straight replacement for Apple's very feeble calculator, giving you a few more regularly required buttons. There's also a scientific calculator which would be ideal for, um... scientists who have lost their calculator. Unfortunately both calculators behaved very oddly on my PCI Mac. Nothing strange there then.

Despite its good intentions, *DiskTools* makes Barbara Cartland look young and sprightly. Mind you, scientists who need to keep a lot of notes about appointments with invisible files will be most interested. In *DiskTools*, that is, not Barbara Cartland.

BeHierarchic 3.0.1

UTILITY

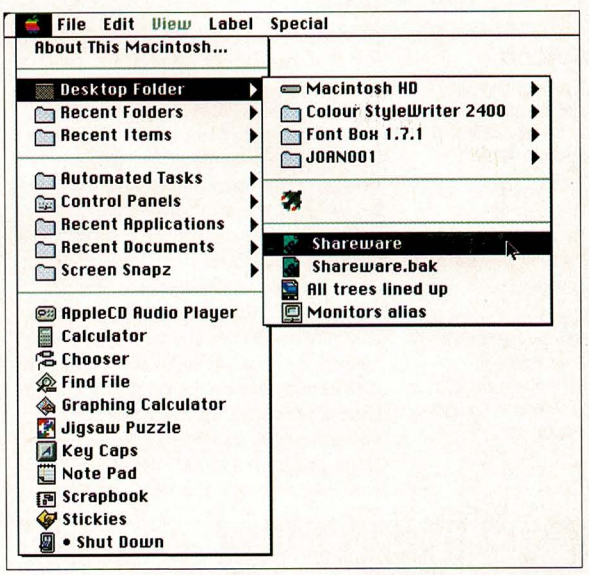
Shareware, registration fee $10

Back in the old days of System 7.1, when your System didn't need 5Mb of RAM to boot, *BeHierarchic 1.0* was one of the great shareware successes. It added sub-menus in the Apple menu, so if you put aliases of folders in there you could view the contents of folders without opening them. It was so popular that *BeHierarchic 2.0* was released as commercial software. Big mistake. Although people might muster the effort to register a really useful shareware utility, they couldn't be bothered to seek out a copy of version 2. Worse still, Apple liked it so much that it incorporated it into System 7.5, with sub-menus showing recently accessed applications and files as well as folder contents. But Apple couldn't have bought the complete rights, because here's *BeHierarchic* version 3, and it's shareware again.

So why pay $10 for something that comes free with System 7.5? Well, it's prettier, showing little icons for all menu items. It's also better organised, with folders, applications and files segregated and divided. Also a Desktop Folder item gives you access to everything on your Desktop, including your hard disk and servers.

Yes it's useful. Yes it only costs $10. But I've got used to Apple's attempt, so I don't think I'll be parting with my hard earned dosh. Mind you, it's

Continued on next page



The Desktop folder of *BeHierarchic* gives you access to everything on the Desktop. Of course, if you use *DocJet*, you won't have anything on your Desktop.

CONFUSED ABOUT SHAREWARE?

■ **Shareware** is a form of 'try before you buy' software selling and it's a great idea so long as you're honest. When you get some shareware, the documentation file accompanying it will tell you how much it costs – typically it's somewhere between US$5 and $40 – and where to send your money. If you like the software and decide to keep it, then you're morally obliged to cough up. Not only do you get the satisfaction of boasting to friends about how honest you are, but the author will often give you something in return for registering, like a printed manual, or updates when released. The most common problem is sending money abroad, but as many shareware authors now accept credit cards, it's getting easier.

■ **Freeware** means that you don't have to pay for it at all. There are many derivations, such as postcardware, which means you have to send a pretty postcard to the author.

But freeware is not strictly the same as **Public Domain** (PD) because although you don't pay for freeware, the author keeps copyright and you have to follow his terms and conditions to use the program. This often means keeping all the files together and not using or selling them for profit.

CapsSave

A typing utility that can detect when you accidentally press the **[caps lock]** key, which prevents you from typing an entire sentence in capitals.

Protector

A startup utility that tests the user's IQ, and refuses to boot up the Mac if you are too stupid.

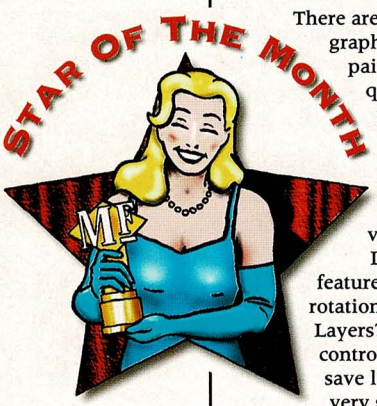
Revenge

An arcade game which adults find simple, but which totally confounds their children.

ShareDraw

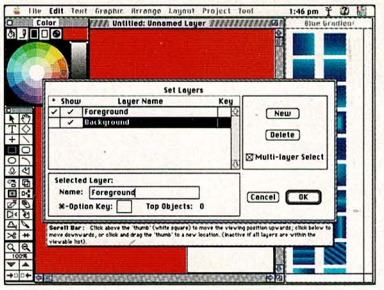
GRAPHICS

Shareware, registration fee $24.95



There are plenty of distinctly average shareware graphics programs around, which enable you to paint pretty splodges and keep your children quiet for a few minutes. But few are recognised as being any good. *GraphicConverter* has gained a following for its ability to handle a wide range of bitmap graphic formats, but PostScript drawing programs are complex things, so can a shareware version be any good?

Load up *ShareDraw* and take a look at the features. All the regular tools are there, including rotation, flipping and scaling. But what's this? Layers? Yes indeed, *ShareDraw* offers complete control over layers. But that's not all. You can save libraries of commonly used graphics, very similar to *ClarisWorks* libraries, and Multi Copy can duplicate a single graphic many times, spinning and enlarging it with every copy. Unfortunately, importing and exporting are fairly limited, but do include the standard PICT and EPSF formats. Alongside this, *ShareDraw* doesn't have particularly advanced text capabilities, although the text wrapping facility does make it suitable for some reasonably complex DTP.



ShareDraw boasts some impressive features, such as layers that can be individually turned on and off.

The most significant absences in *ShareDraw* are paths, or bezier curves, meaning that it's not exactly a serious alternative to *FreeHand* or *Illustrator*. However, for your $25 you'll get a top notch graphics program that will satisfy most home users, and even surprise a few professionals. If you use *Color It!* instead of *Photoshop*, then *ShareDraw* could be a useful program for you.

WoeBeUs

A Control Panel for masochists which makes your Mac crash even more often than usual. Not to be confused with the similar System 7.5.2.

Suicide

A role-playing game where you can choose which top position at Apple Inc to take.

OpenUp

A utility that solves all your problems with Open Transport. (It deletes it and goes back to what we always used to have.)

rather sad that once again Apple is forced to play catch-up with shareware authors.

DocJet 1.1.0

UTILITY

Shareware, registration fee $10

What does your Desktop look like? Some people believe that Desktops are for the hard disk and Wastebasket; anything else is decadence. Others reckon Desktops are for storing aliases of every application you own, and any file that you might need in the next six months. Users of the latter persuasion may well want to take a look at *DocJet*. Instead of having a separate alias for every application, you can drag any file onto *DocJet*, and get it to open up in the application you want.

Using it is easy, despite the fact it has an on-line manual that was apparently written in Spanish and fed through an auto translation program. If *DocJet* has never seen a file of a certain type before, it will ask what application you want to open it with. Next time it sees a file of the same type, it will automatically open it with the same program. Sometimes you may want to over-ride the default application and open a file with something different. You can do this by simply holding down a user-defined key when you drag and drop.

You can also open any application or file by holding down a user-defined key at the same time you double-click on *DocJet's* icon. This means there's no real need to keep anything but this one icon on your Desktop.

Unfortunately, the icon looks like it was drawn by an artistically challenged four-year-old. Of course, you can change it by pasting your own picture into the Get Info window. A cunning trick would be to paste your Desktop pattern into the icon box, then pop *DocJet* into the lower left corner of your screen. Because the icon will be the same pattern as the Desktop, effectively it will be invisible, but you can still drag files onto it and launch them. Wow.

Extension List

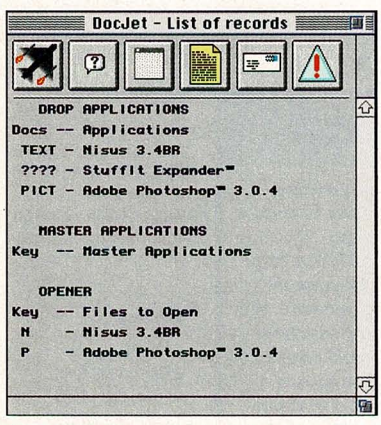
STARTUP UTILITY

Shareware, registration fee $11

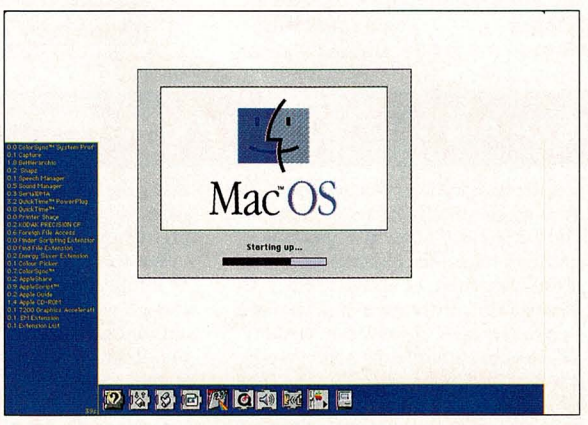
One of the things that makes the Mac easy to use is the way Extensions and Control Panels are neatly stored in the System Folder, each with its own icon. You probably won't appreciate how simple this system is until you've tried, and failed, to use a PC. The main thing you have to worry about is gaining too many of them. They make your Mac more liable to crash and, once it has crashed, it takes ages to boot up again.

Extension List is designed to help... I think. Once installed, instead of getting those icons parading across the bottom of your screen, you get a text list scrolling up the screen, naming each Extension. The author claims this prevents the clutter of all those icons. Well, I suppose it does, although I've never really been too upset by watching icons appearing across my screen. It's not like they smell or blow raspberries at you. And since *Extension List* itself consists of an Extension and a Control Panel, it might end up causing more problems than it solves.

Symbionts, another shareware program featured in MACFORMAT 34, forces almost all Extensions to show their icon at startup and tells you how much RAM each one uses, which is very handy. About the only thing *Extension List* is useful for is not defacing my startup picture of Pamela Anderson. Not that I have one, but if I did...



If you double click on *DocJet* while holding down [P], *Photoshop* will launch. Simple.



It's a well known fact that a man's virility is measured by the size of the row of Extensions displayed at startup. Mine's usually a lot bigger than this.

ChaosVR-v0.6a

PROGRAMMING

Freeware

Many moons ago, I came across a shareware game called *3D Screamers*. I booted it up, grabbed my mouse, and found myself careering around a 3D environment at breakneck speeds. It seemed too incredible that someone would release a *Descent* clone for free.

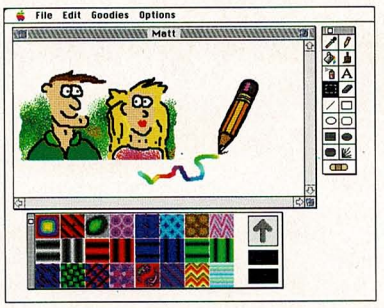
Unfortunately, shareware is often like the supermarket. The sign outside declares half price beer, but when you get inside, they've sold out.

Such was the case with *Screamers*. It was just a taster to lure you in. Interestingly, though, it wasn't a demo for a full game, but a sample of a new

MattPaint

GRAPHICS

Shareware, registration fee $25



MattPaint offers fewer tools than the free copy of *Color It!* and costs $25. Let me at it.

For five cents more than *ShareDraw,* you can be the proud owner of *MattPaint.* As the name suggests, this is a bitmap graphics program, just like *Color It!* The difference is that while *Color It! 2.3.5* was free with MACFORMAT 31 and is excellent, *MattPaint* will cost you the equivalent of eight pints of beer and is pathetic. You can draw boxes. You can draw circles. But wait – that's not all – you can draw straight lines. And that really is all. No effects, no sophisticated tools, no fun features.

There is an enticing pull-down menu called Goodies. Surely there must be something terribly exciting here. Brush Shapes enables you to select a round brush, or a square brush, or – if you're feeling really wild – a rectangular brush. Eraser Shapes offers the choice of a round eraser, or a square eraser.

FatBits sounds interesting, and possibly just a little bit rude. However, in reality it shows you a small area of the picture in close up – sort of like a zoom facility, but not as good. Still, at least the program has a Magic Wand tool to enable you to select a block of a single colour, except that it only appears to work with solid areas of black or white. The only way you will enjoy using *MattPaint* is to drink the eight pints before loading it.

utility, for boffins who can program in C, the most popular programming language. The company, Virtually Unlimited, had produced ready-made code, which programmers could easily adapt to produce their own 3D games. *ChaosVR* is their second demo, now that their programming product seems finished.

The speed of the graphics is extremely impressive, as you whizz across a complex 3D landscape like a 17-year-old joyriding a Ford Cosworth. Unfortunately, the gameplay is as gripping as a Sunday afternoon jaunt in my Skoda (with one of the doors still missing). You fly about a bit, shoot some bystander polygons, then fly about a bit more. Gosh, nurse, get me a tranquilliser.

There's no disputing that the game engine is impressive, and we might see tons of 3D shareware games being released in the near future. But if we do, let's hope they're better games than this demo.

DiskTracker 1.0

DISK UTILITY

Shareware, registration fee $10

The ReadMe announces that this program is not just another disk cataloguer. It lies. Admittedly, it's good – perhaps the best I've seen – but it is a disk cataloguer. Not that that's anything to be ashamed of. It scans disks, whether floppy, hard, or CD, and makes a catalogue of every file and folder on them. This means that you can browse through the contents of that disk at a later date without having it mounted. You can also perform a Find, just like you can on the Desktop. As such, you could catalogue all MACFORMAT's CDs and perform a search across all of them for a particular program, saving a significant amount of time when compared to interrogating them individually. For $10, this seems like a good deal.

AntiQuadra 2.0.2

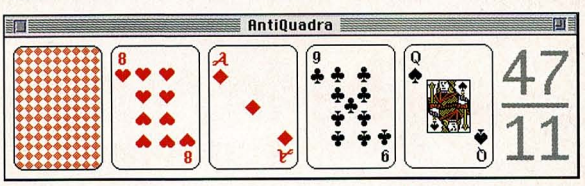
CARD GAME

Freeware

There are lots of card games available for the Mac, but this one caught my eye because of its name. I had visions of a poker game that would only work on a Quadra. I was hoping for high stakes – lose the game and expect it to trash your hard disk.

Alas I shall have to seek my kicks and thrills elsewhere. It's a standard Patience game and works on any Mac. In fact it's fat. That's not an obesity joke, but a term that means it runs native on a PowerMac. But I'm not sure why this should be necessary; all the game does is deal out four cards, waits for you to choose which cards to discard, then deals another four. Hardly a processor-intensive task, and it works as fast on an LC as on a 7200.

There's no thought needed for the game. If there are two or more cards of the same suit, you discard the cards with the lower value. Deal another four cards. Do the same. Keep going until you end up with four aces, you die, or your Mac crashes. Oh yes, on my third or fourth go, it turns out that *AntiQuadra* is really AntiPowerMac. I opened it up again to get some screenshots and it crashed. I want my money back. (What d'you mean it's free?) **MF**

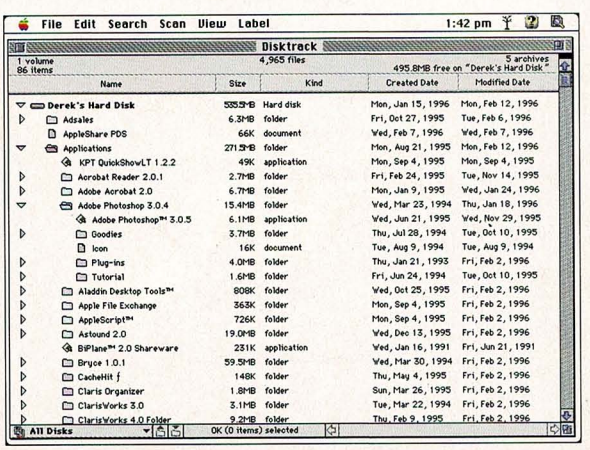


No expense has been spared on the graphics. Sorry, that should have been 'spent'.

HARD MAN

A music program for composing heavy metal, which adds authenticity by smashing your floppy drive and messing up all your files.

This particular *ChaosVR* world seems to have a problem with blue smog. Perhaps the spaceships should convert to lead-free anti-matter.



If you buy the CD version of MACFORMAT you might like a disk cataloguer. If you don't know what they do, take a look at *DiskTracker.*

MOTHER

A program which defragments your hard disk in the same way as *Norton,* but which tells you not to be so untidy in the first place while it does it. (You treat this place like a hotel…)

Buying advice

Whether you're buying by mail or in person, here are a few basic, sensible precautions to bear in mind. Note that everything here applies to buying from a business; most of it does *not* apply to buying from a private seller in MACFORMAT's reader ads pages.

Always be absolutely clear about what is included in the price – postage and packing? Any necessary cables, etc? VAT? By law, an advert must say *explicitly* if VAT is not included; if it doesn't, VAT *is* included. But this could be in the small print – so make sure you read it all! If you're buying in person, check that everything is there and that it all works properly before you leave the shop. If you're buying by mail, ring the supplier first to confirm the price and availability, and ask what your options will be if there should be any problem. Find out when you can realistically expect delivery. Always keep all the receipts and make records of all correspondence, whether it's by mail or by phone.

How to protect yourself

If you are buying goods of more than £100 in total value, use a credit card if possible. That way, if anything goes wrong, you'll be legally entitled to claim against the credit card company as well as the seller, even if the seller's gone bust. You might also get extra insurance – ask your credit card company.

If you don't have a credit card, pay by cheque or postal order (ask at your local post office). Never send cash through the mail – it can't be traced if it gets lost, you can't stop payment, and even if you have proof of posting, you can't prove how much you sent.

Keep records. If you're paying by credit card, keep a note of the exact time of the order and ask for an order number. If you're paying by cheque, make sure you fill in the details of the date, amount and payee's exact name on the stub – and keep it!

When a mail order arrives

Check everything carefully. If anything is missing, contact the supplier immediately. If something doesn't work, make all the obvious checks (the fuse, etc), but don't try to repair it. If there's anything you're not happy with, don't use it – if you do, you could be deemed to have accepted it.

If there's a problem

Whether you bought it by mail or in a shop, the law says a product must be:

1. 'of merchantable quality' (that is, broadly speaking, it must actually work);
2. 'as described' (in the advert or in person – and this criterion also applies when you're buying from a private seller); and
3. fit for the purpose for which it was sold or for the purpose you specified when you ordered it.

If it fails to meet any or all of these three criteria, then you are entitled to return the goods for a refund, receive compensation for all or part of the value, or get a replacement or free repair, depending on the seriousness of the defect. These are the 'statutory rights' that adverts always say are 'not affected' by any extra guarantees. The supplier cannot change or deny these rights.

How to complain

If you're not happy about something, always contact the supplier first and politely explain your problem. Most problems are sorted out at this stage with no fuss. But if yours isn't, put your complaint in writing, clearly stating your problem and including any relevant dates, etc, and send it to the manager or owner – ask for the correct name and job title. Give the supplier a reasonable time to reply – say, ten days or so.

If the problem is still not resolved, you may need to take some sort of legal action to enforce your rights. This need not cost you a lot of money. You should seek advice from a solicitor (ask about the free advice scheme) or from one of the following organisations (check in your local telephone directory):

- Citizen's Advice Bureau;
- Trading Standards Office (listed under your local council);
- Office of Fair Trading; or
- County Court (ask someone there about the 'small claims procedure').

the internet magazine
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COLOR-IT!™

Version 3.0.4

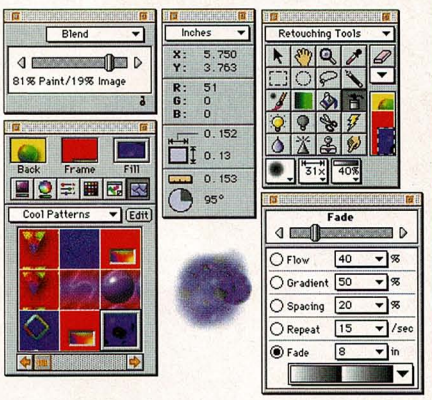
The latest version – exclusive

We gave away *Color It! 2.3.5* on MACFORMAT 31's Cover CD-ROM and floppy disk (if you missed it, see over the page to order your copy). Now we bring you the exclusive chance to buy the NEW *Color It! 3.0.4*, to give you image editing features that are on a par with those of the mighty industry standard, *Photoshop*. This latest version of *Color It!* offers a range of new, powerful features, including:

- Fully-native PowerPC version
- CMYK four-colour separation
- RGB channel editing
- Extrude and drop shadow filters
- User-defined Undo levels (up to 16)
- Levels and Curves filters
- Unsharp Masking filters
- Bezier Brush tool
- Kernel Brush tool
- Crop tool
- Live filter previews
- Palettes combined to save screen space

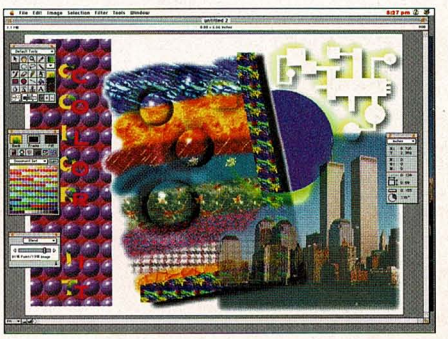
... and much more.

Color It! has come a long way – version 3.0.2 rated a storming 88% in MACFORMAT 28. So don't miss out on this opportunity. This up-to-date version is available nowhere else in the United Kingdom, and *Color It! 3.0.4* is available from MACFORMAT for a limited period only. It can be yours for only £49.95, inclusive of delivery and VAT.



If *Photoshop* is beyond your budget, then the latest version of *Color It!* is a serious alternative.

Price: £49.95
Order code: MCFCT3



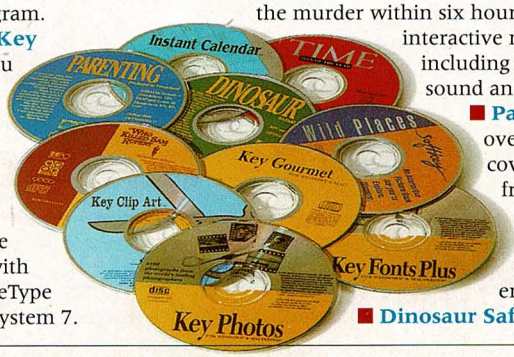
SoftKey Ten CD Pack – ten CDs for only £29.95!

Fonts, clip art, games, edutainment, and more

■ **Key Home Gourmet.** A sophisticated and powerful cooking program.

■ **Key Clip Art and Key Photos.** These give you a library of 5,000 quality TIFF images to copy into your own documents.

■ **Key Fonts Plus.** 303 fonts to enhance your documents. These fonts are compatible with the PostScript and TrueType format supported by System 7.



■ **Who Killed Sam Rupert?** Can you solve the murder within six hours? This game uses interactive multimedia, including full motion video, sound and animation.

■ **Parenting.** Includes over 400 images covering everything from fertility to childbirth! Features a complete medical guide and emergency section.

■ **Dinosaur Safari.** Find out all about dinosaurs, geography, flora, fauna and geology. It's an interactive learning game that the kids are bound to love.

■ **Instant Calendar.** Use *Instant Calendar* to keep track of meetings, appointments, birthdays and other events.

■ **Wild Places.** 100 scenes of beautiful North American landscapes accompanied by original audio clips.

■ **TIME: Man of the Year.** Some of the most influential people of the 20th century.

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Create stunning effects and explore the new realms of digital imaging with the latest set of plug-in compatible effects tools. *KPT 3* delivers rich and complex special effects, unmatched by any other filters or extensions available today. Transform your digital artwork with intense gradients, textures and lens effects, taking advantage of a new interface, new filters and bigger, faster previews. *KPT 3* scored an impressive 77% in MACFORMAT 33 and sets new standards for *Photoshop* plug-ins. With hundreds of preset textures, *KPT 3* is a must, and works with all plug-in-compliant software.

Kai's Power Tools 3 **Price: £111.62**
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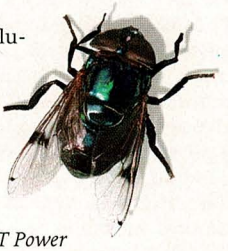

KPT Power Photos 2 **Price: £111.62**
Order code: MCFKPP2

ONLY £95 plus VAT

KPT Bryce

(MACFORMAT 20: 91%)

Produce incredible landscapes on your Mac using *KPT Bryce*. You have complete control over the shape and form of your terrain. Clouds obey your every mouse-click and a violent thunderstorm can be conjured up in seconds. Miraculously journey into outer space; visit unknown planets and their mysterious moons.

Once you've started to use this software you'll be unable to stop creating wonderful graphics – it's that compulsive. Reviewed in MACFORMAT 20, *KPT Bryce* scored an impressive 91%. *KPT Bryce* requires an LCII or better, 4Mb of free RAM, and System 7 or later.

KPT Bryce **Price: £111.62** **Order code: MFKPT**

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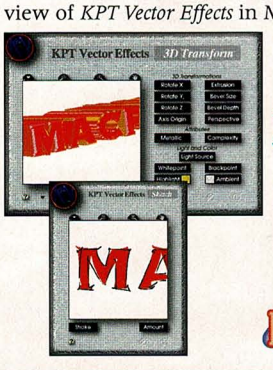
KPT Vector Effects

(MACFORMAT 29: 92%)

KPT Vector Effects does for *FreeHand* and *Illustrator* what *Kai's Power Tools* did for *Photoshop* – it adds a brilliant new dimension to both of these programs, enabling you to easily create stunning 3D effects. Using the innovative interface you can rotate, swivel, bend and alter the look of any object, including text, to whatever you want. You'll find a full review of *KPT Vector Effects* in MACFORMAT 29, where it scored 92%.



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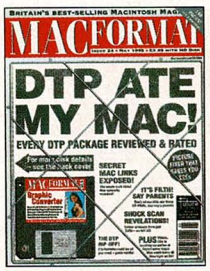

ISSUE 24

May 1995

■ **On the disk:** *Graphic Converter; MacCheckers!*

■ **On the CD-ROM:** demos of five top DTP programs, including *QuarkXPress* and *PageMaker*, plus *Photoshop 3.0* and *ClarisWorks 3.0*.

■ **Inside:** every Mac DTP package reviewed and rated; colour scanners; networks explained; *PhotoFix* reviewed.

Order codes:
CD-ROM MFCD24
HD Disk MFHD24

ISSUE 25

June 1995

■ **On the disk:** *Knot 1; MacSnails; Glypha 3, TypeIt4Me, Electric Poet* and MIDI files.

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available.

■ **Inside:** all you need to know about PowerMacs, fax-modems tested; plus some 'Cosmic' CD-ROMs.

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HD Disk MFHD25

ISSUE 26

July 1995

■ **On the disk:** animation programs, *Disinfectant 3.6, Telefinder* and *Digital Arts*.

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available.

■ **Inside:** animation on the Mac; 15- and 17-inch monitors reviewed; comms made easy with *TeleFinder* and DIY multimedia.

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HD Disk MFHD26

ISSUE 27

August 1995

■ **On the disk:** *Anagrams, Word Breaker, Smart Calendar, Xearth* and *BattleTanks*.

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available.

■ **Inside:** the complete guide to portable Macs; Internet basics series; plus portable printers reviewed.

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HD Disk MFHD27

ISSUE 28

September 1995

■ **On the disk:** *Catch The Buzz, Lobster, DragThing.*

■ **On the CD-ROM:** *Color It!, Dark Forces, Circle Elements* and *WorldWrite* demos, plus over 75 high-res clip photos.

■ **Inside:** image editing; what those Extensions and Control Panels *do*, graphics tablets, PaperPort scanner and *Dark Forces* reviewed.

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CD-ROM MFCD28
HD Disk MFHD28

ISSUE 29

October 1995

■ **On the disk:** clip art, games and utilities, fonts.

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available.

■ **Inside:** eye-catching black-and-white DTP; clip art collections, *KPT Vector Effects*, language learning software and multimedia encyclopaedias reviewed.

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HD Disk MFHD29

ISSUE 30

November 1995

■ **On the disk:** *MacPipes, MacQubic, Gossamer* and *Do It All!* personal organiser.

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available.

■ **Inside:** publishing on the Net and CD-ROM, QuickTime utilities, *Alone in the Dark, SmartSketch*, input devices – alternatives to the mouse.

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HD Disk MFHD30

ISSUE 31

December 1995
Double-disc special!

■ **On two disks:** *Color It! 2.3.5* – full version, *Factory.*

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available.

■ **Inside:** 50 ways to make your Mac run faster, *ClarisWorks 4, Doom 2, SoftWindows*, personal organisers, programming.

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ISSUE 32

Christmas 1995

■ **On the disk:** *Pentominoes, Frog Xing, Xmas Lights, FindText 1.3*, utilities.

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available.

■ **Inside:** create great art on your Mac, the new range of PowerMacs, *PageMaker 6*, kids' multimedia, *Wing Commander 3*.

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HD Disk MFHD32

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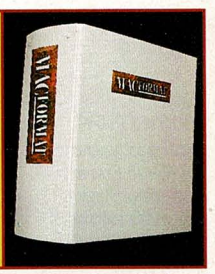

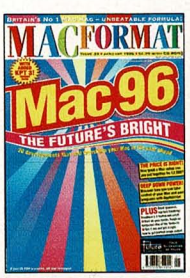

ISSUE 33

January 1996

■ **On the disk:** *Eclipse 3, Altair 2, Gravity Balls 1, TextBrowser 1.1, Aaron.*

■ **On the CD-ROM:** *Doom, Descent, Voodoo Lounge*, education demos and more.

■ **Inside:** what's happening on the Mac in 1996, *KPT 3, Day of the Tentacle, Aladdin, Session 2*, guide to buying a Mac setup.

Order codes:
CD-ROM MFCD33
HD Disk MFHD33

ISSUE 34

February 1996

■ **On the disk:** *Disk Wizard, DOCMaker 4.1, SoundApp, ScreenShot, Symbionts.*

■ **On the CD-ROM:** *VIDI Presenter Pro 3.1* complete, *Infini-D 3, Amapi 2*, clip art.

■ **Inside:** new 3D graphics technology and software, storage systems, kids' multimedia, *ClarisImpact 2, Doom 2* tips, handling text files.

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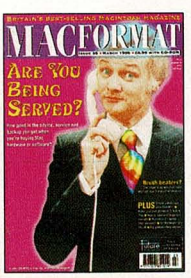
HD Disk MFHD34



ISSUE 35

March 1996

■ **On the disk:** *Smoothie, Shatterball, NoteBook Maker, Diagonal* and *BeerStack.*

■ **On the CD-ROM:** *Fractal Design Painter 4, Klik & Play, Code Warrior Lite* complete.

■ **Inside:** Mac advice, service & backup assessed, Natural Media, *PageMill*, handling foreign file formats, *Marathon 2*, gamebusters.

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F/A-18 Hornet 2

All-new, slightly improved, or a money-spinning rehash of a classic Mac flight sim? Jim Chandler braves a trip into battle-torn Korean airspace to investigate...

Here's an unusual thing: a new version of an old game. It's not *Hornet, the sequel*; it's an improved version of the classic Mac flight sim that's been around since 1983, and which scored 85% in MACFORMAT 10.

Version 2's improvements include better graphics, sampled speech and new missions. The game is now PowerMac-native, as well as being able to run on your less exotic Mac too.

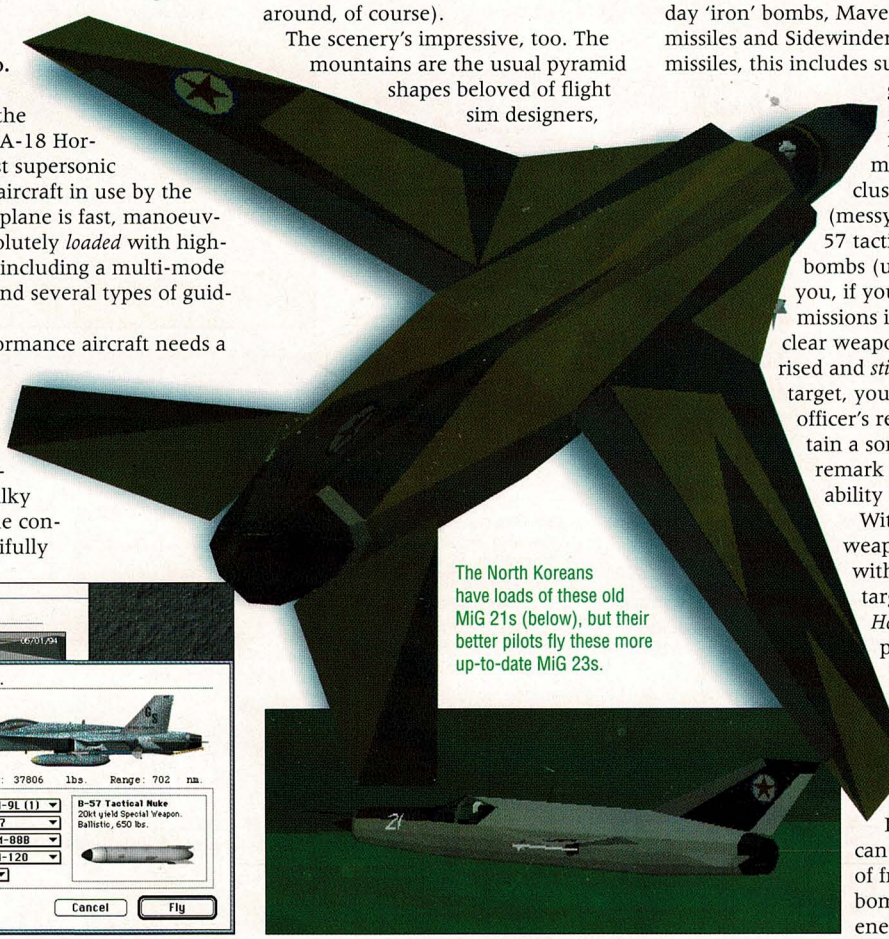
This sim's based around the eponymous F/A-18 Hornet, the newest supersonic fighter/attack aircraft in use by the US Navy. This plane is fast, manoeuvrable, and absolutely *loaded* with high-tech gadgetry, including a multi-mode radar system and several types of guided missile.

A high performance aircraft needs a high performance flight sim, and *F/A-18 Hornet 2* certainly delivers. Flying is silky smooth and the controls are beautifully responsive. Even with all the scenery complexity settings turned on, the game ran at a more than acceptable speed at a resolution of 832 x 624 pixels on a PowerMac 6100/60. It also supports up to three 21-inch monitors at this resolution, although you'd either need to turn down the scenery complexity or use a very fast PowerMac to achieve reasonable speeds like this (and that's if you just happen to have three big monitors knocking around, of course).

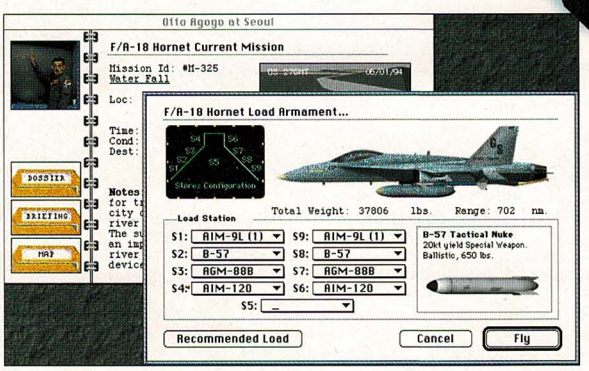
The scenery's impressive, too. The mountains are the usual pyramid shapes beloved of flight sim designers, but other features are rendered in lovely detail. There are loads of nice touches: ground vehicles at the airports, tow trucks, cranes, and even open hatches on the aircraft carrier from which some of the missions are launched. There are also various types of aircraft flitting around – both friendly and enemy – including fighters, bombers, helicopters, and even civil airliners. Good use of sound also adds to the realism – if you have 8Mb of RAM or more, you can hear sampled radio messages from your groundcrew or wingman.

Weapons fans will love the large range of high-tech, high-nastiness ordnance available for subduing the enemy. As well as your normal workaday 'iron' bombs, Maverick-guided missiles and Sidewinder air-to-air missiles, this includes such exotic goodies as AIM-120 long-range air-to-air missiles (handy), cluster bombs (messy), and even B-57 tactical nuclear bombs (ulp!). Mind you, if you fly one of the missions in which nuclear weapons are authorised and *still* miss your target, your commanding officer's report will contain a somewhat tetchy remark about your ability to aim.

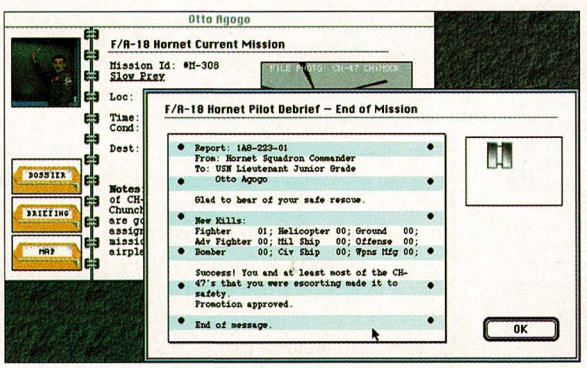
With all these weapons to play with, you need a target. *F/A-18 Hornet 2* provides plenty of these, in a series of missions based on the Gulf War. From your base in Kuwait, you can fly in defence of friendly bombers, chase enemy helicopters,



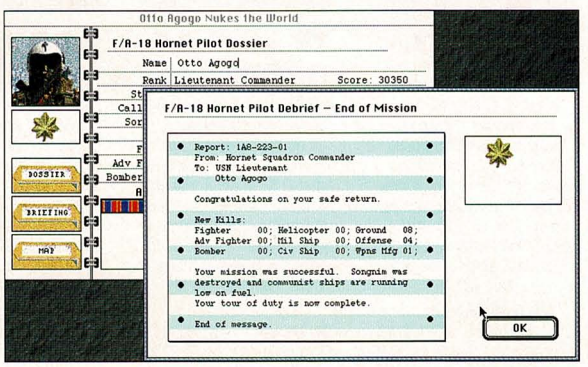
The North Koreans have loads of these old MiG 21s (below), but their better pilots fly these more up-to-date MiG 23s.



Your plane can carry all kinds of bombs and missiles, including the nuclear variety.


Otto Agogo
F/A-18 Hornet Current Mission
Mission Id: #M-308
Slow Prey
F/A-18 Hornet Pilot Debrief – End of Mission
Report: 1A8-223-01
From: Hornet Squadron Commander
To: USN Lieutenant Junior Grade
Otto Agogo
Glad to hear of your safe rescue.
New Kills:
Fighter 01; Helicopter 00; Ground 00;
Adv Fighter 00; Mil Ship 00; Offense 00;
Bomber 00; Civ Ship 00; Wpns Mfg 00;
Success! You and at least most of the CH-47's that you were escorting made it to safety.
Promotion approved.
End of message.
OK

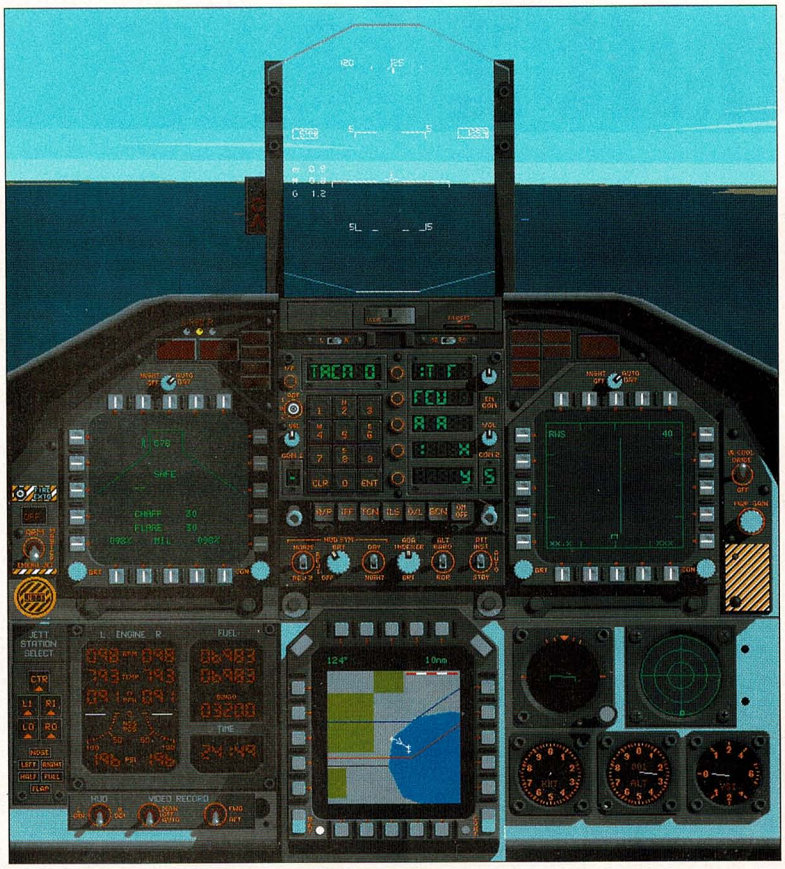
(Right) A successful mission could mean a promotion.


Otto Agogo Nukes the World
F/A-18 Hornet Pilot Dossier
Name Otto Agogo
Rank Lieutenant Commander Score: 30350
F/A-18 Hornet Pilot Debrief – End of Mission
Report: 1A8-223-01
From: Hornet Squadron Commander
To: USN Lieutenant
Otto Agogo
Congratulations on your safe return.
New Kills:
Fighter 00; Helicopter 00; Ground 08;
Adv Fighter 00; Mil Ship 00; Offense 04;
Bomber 00; Civ Ship 00; Wpns Mfg 01;
Your mission was successful. Songnim was destroyed and communist ships are running low on fuel.
Your tour of duty is now complete.
End of message.
OK

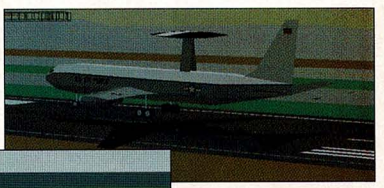
(Far right) If you complete all the missions, you can retire and play golf. After the life of fighter pilot that must be really exciting.

THE OPPOSITION

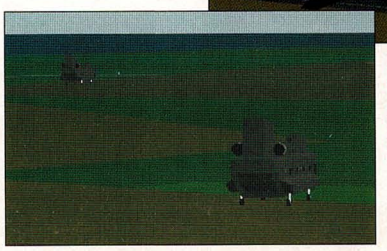
If you want to check out *F/A-18 Hornet 2's* competition, take a look at the reviews of *Flying Nightmares* (93%, MACFORMAT 14), and *A-10 Attack!* (89%, MACFORMAT 28). If you missed these, see page 117 to find out how to order a back issue.



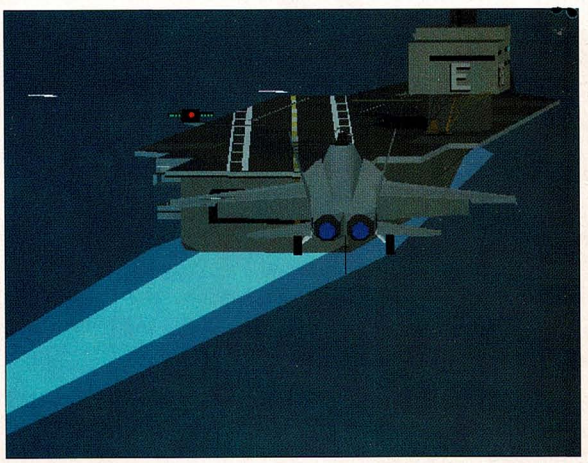
Amazingly, all these buttons actually mean something. Now's a good time to read the manual.



AWACS radar aircraft like these keep a watchful eye out for enemy planes.



Cue *Ride of the Valkyries*. You have to keep this gaggle of Chinooks safe from prowling North Korean fighters.



Landing on an aircraft carrier is like getting a pay rise – it's all in the approach.

seek and destroy SCUD missile sites, and shoot down enemy aircraft. The missions are imaginative and interesting, and increase gently in difficulty, from easy bombing and air patrol missions to desperate strikes deep in enemy territory. And when you've finished all the missions? Fear not, because Graphic Simulations has kindly also released a whole new set of missions, available separately.

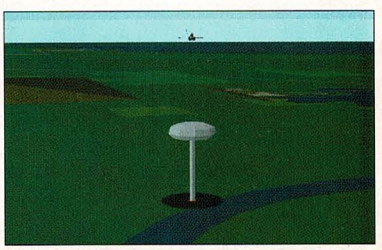
Korean Crisis

Called *Korean Crisis*, the set of new missions revolves around an imaginary war with a nuclear-armed North Korea, and takes place in (obviously) the Korean peninsula. Hmm, Kuwait, Korea... where will the next lot be set? Kenya? The Kalahari?

Korean Crisis offers you more of the same: bomb things, shoot things down, shoot things down and *then* bomb them. Variety is provided by interesting new features, like a satellite launch facility (to be bombed) and different MiG fighters (to be shot down). As well as new missions and new aircraft, *Korean Crisis* provides greener scenery and spectacular locations, such as Seoul International Airport.

Beware, though: *Korean Crisis* is not a game in its own right – you use it with *F/A-18 Hornet v1* or *2*. With this in mind, *Korean Crisis* is a bit expensive, considering it costs as much as a normal computer game. If you're a *Hornet* addict and you've completed all the original missions with all the difficulty settings at full, then the new missions are a sound investment; but for most armchair fighter jocks the Kuwait missions alone will probably suffice.

The big question is: how does *F/A-18 Hornet 2* compare with *A-10 Attack!* – the other major Mac flight sim? Very well indeed, is the answer. *A-10 Attack!* has the edge in terms of graphics, but the extra detail comes at the expense of speed, and its juddery performance can't compete with *Hornet's* smoothness. *Hornet's* missions also make more sense than *A-10 Attack!'s* rather contrived offerings. Where *F/A-18 Hornet 2* does lose out, however, is in its lack of opportunity for strategic planning. The missions are handed out to you fully formed, and you can't alter them. While this may be realistic (after all, how many fighter pilots help plan the war they're fighting?), it does remove a potentially interesting element of gameplay.



Ha! A direct nuclear strike on... a river. An enemy river, mind.

The original version of *F/A-18 Hornet* was hailed as a classic, and version 2 is better still. If you want a realistic, absorbing and fun military flight simulator, *F/A-18 Hornet 2* has got to be at the top of your list. **MF**

F/A-18 Hornet 2

Price: £69.32. **Out:** now.
Requires: LC or better, 4Mb of RAM (8Mb for speech), System 6.07 or later, 14Mb of free hard disk space, 13-inch monitor (colour or monochrome).
Contact: Softline on 0181 401 1234.

Graphics 90%
Detailed and clear, with some nice touches and gorgeous scenery.

Sound 64%
The sampled messages from your groundcrew and wingman add realism.

Gameplay 92%
Fast, fluid, realistic and fun – a classic war-based flight sim.

MACFORMAT RATING 93%

Korean Crisis

Price: £39.99. **Out:** now.
Requires: *F/A-18 Hornet (v1* or *2)*, LC or better, 4Mb of RAM (8Mb for speech), System 6.07 or later, 14Mb of free hard disk space, 13-inch monitor (colour or mono).
Contact: Softline on 0181 401 1234.

Graphics 90%
A repeat of the detailed action and superb scenery from *Hornet 2.*

Sound 64%
Again, the sounds are identical to those in *Hornet 2.*

Gameplay 61%
Some interesting missions, but nothing too exceptional.

MACFORMAT RATING 66%

Stress

During the Vietnam War, an experiment that monitored stress levels in US Navy pilots found that landing on a carrier at night was even more nerve-wracking than air-to-air combat.

Rebel Assault 2

You remember the bloke from *Star Wars* with the long black cloak? Well he's back to breathe heavily all over you again. Lindsay Bruce offers him some Clorets.

MAY THE SEQUEL BE WITH YOU

LucasArts is currently in production on the next *Star Wars* trilogy. Due out some time in 1998, the first of the three new films is set 30 years before young Skywalker takes up his light sabre. In the meantime, LucasArts is busy remastering the original trilogy and adding modern special effects for re-release some time next year.

Oooh look, another sequel! Gosh, what plot have they come up with this time? *Rebel Assault 2* is out, and Lord Vader is more sinister than ever.

You are Rookie One, a fighter pilot with the Rebel Alliance, seeking to rid the galaxy of the evil Empire™ headed by the Emperor and his nasty sidekick, Darth Vader. Last time around, in *Rebel Assault* (which scored 90% in MACFORMAT 18), you whipped their backsides roundly and blew up the Death Star, Vader's personal project to build a star destroyer the size of a planet. (Oh come on, what do you mean you haven't seen the films?) Now he's miffed and wants to destroy the Rebels for good with an ever so hush-hush secret weapon the Empire is testing. Your job is to find out what it is and destroy it before the empire can put it to use against the Alliance.

That's the plot, as if you needed one. *Rebel Assault 2* is a straightforward shoot-'em-up, comprising 15 chapters, which have you flying different Rebel (and even Imperial) craft through canyons, around Star Destroyers, into space stations, and even mining complexes. Periodically, you leave your ship and do a bit of walking, even if it is only to shoot Storm Troopers.

'Okay, folks, shoot out these deflector shields, and we can all go down the boozer for a swift half.'

It's a film!

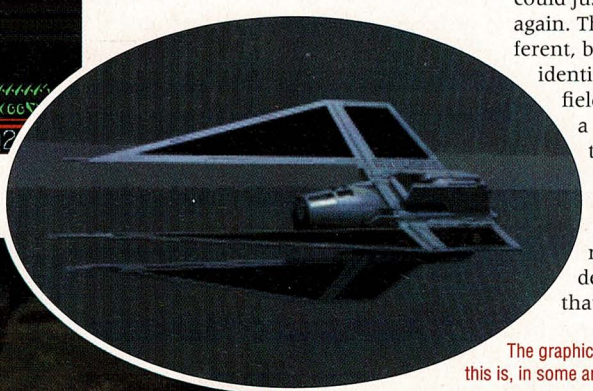
Between each chapter are nifty bits of video footage, which inform you of the plot progression and what you'll be doing in the next chapter. These are so successful you feel like you're watching a big-budget movie, not a computer game. Real actors play the parts of your co-pilots, tutors, and foes, and the integration of real video footage and computer generated graphics is seamless. Although these sections have obviously been compressed to get them to play back at full screen without slowing down, the quality is astounding – even the computer generated bits are amazing.

But video footage does not a great game make. The game graphics themselves are less stunning, although impressive nonetheless. More importantly, as in *Rebel Assault*, you are restricted to only a few degrees of lateral movement in the flight sequences. However, where this was obvious and frustrating in *Rebel Assault*, it has been much better composed for the sequel. Your flight path for most of the in-cockpit gameplay twists and turns so much anyway that trying to do any more complex aerial stunts will be the last thing on your mind.

No! It's a game!

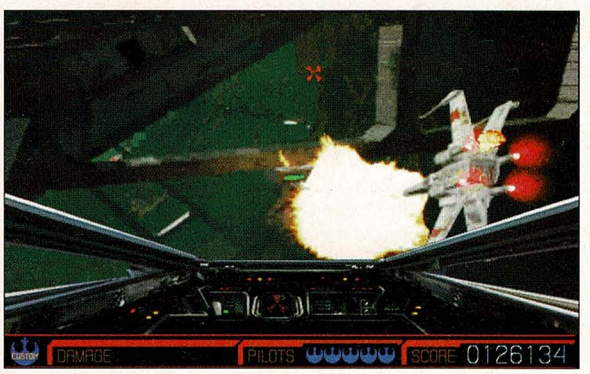
In terms of gameplay, *Rebel Assault 2* is much the same as the original. The graphics and sound have been improved, and some parts of the interface are much better, but overall, this could just be *Rebel Assault* all over again. The story and the levels are different, but the level objectives are identical: get through this asteroid field without being smashed into a million pieces; shoot down those marauding TIE Fighters; fly through canyons... been there, done that. It's fun to start with, but if you've already played the original to death, then it's almost certain that you'll soon tire of the sequel.

If you get bored with blowing up Imperial space stations, you can always go head to head on the ground with a few Storm Troopers.



The graphics in *Rebel Assault 2* are stunning, but this is, in some areas, to the detriment of the gameplay.

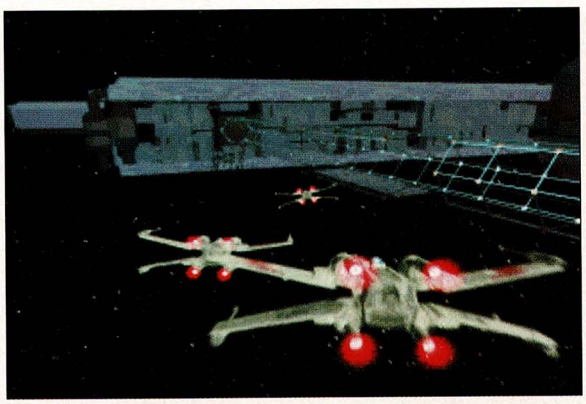
This looks like the hardest part of the Interplanetary Proficiency Test.



'And on your left is the Imperial mining station's main chamber. Don't touch please, the paint is still wet. Now, if you'll follow me to the reactor core...'

Part of the game involves nicking Darth Vader's new secret weapon hidden deep inside a star destroyer. If only I could find that map...

'Hey, I'm too fat to get my seatbelt on, anybody got a crowbar? Now, where are the indicators on this thing?'



Last service station before the M25. Join the queue here for extortionately priced petrol, stale sandwiches and coachloads of suicidal tourists.

'Oi, watch it, mate! Uh, forget the crowbar, has anyone got any spare trousers?'

There's no randomness to the levels; nothing to make each game different.

Rebel Assault 2's interface does offer a few improvements which add to the ease of replaying and saving games. As you complete each chapter, your progress is saved in your Preferences file. If you don't manage to complete a level on your first go, you can go back and just select that level again, without having to dig out the code book and enter the right key combination. This also gives you a quick Level Select for the chapters you've already completed – so if you fancy quickly attacking a Star Destroyer before you go to work, school, or have your tea, you just double-click on the appropriate level. If you're after that elusive high score, you can also save your game to continue at a later date.

No, the film part's better

The fact that you can also change the difficulty of the game level by level (using the built-in Difficulty Editor, altering how accurate enemy fire is, how much damage each hit does, and so on) makes it all too easy to cheat your way through. That's a shame, because while *Rebel Assault 2* is sumptuous to look at, and entertaining to play through once, there's little motivation to play it again. Increasing the difficulty doesn't help, because there's no real difference in gameplay between the difficulty levels, making it unrewarding to replay. In most levels of *Rebel Assault*, you got the choice of which tunnel you wanted to fly, run, or fall down. Here, that ingedient is lost, and the designers have concentrated on the graphics. Your flight path is predestined, all you have to do is shoot things along the way. This is pity, because that element of choice was what gave *Rebel Assault* its longevity. *Rebel Assault 2* is a one-off challenge – if you play it again it'll be for the pretty graphics and movie atmosphere. **MF**

X-Wing on next page.

Don't make the mistake of reminding him of his Green Cross days.

REBEL ASSAULT 2

Price: £44.99. **Out:** now.
Requires: Quadra or PowerMac, System 7.1 or later, 4.7Mb of free RAM, double-speed or faster CD-ROM drive, 13-inch monitor, 1Mb of hard disk space.
Contact: Virgin Interactive on 0171 368 2255.

GRAPHICS 92%
Undoubtedly some of the best graphics you'll see in any game of this genre. Luvverly.

SOUND 91%
Original soundtrack by John Williams. (It brings a tear to the eye.) 16-bit stereo sound samples and music. Gripping.

GAMEPLAY 65%
Good, but not sufficiently different from the original. All the longevity of an over-ripe banana.

MACFORMAT RATING 78%

IT IS YOUR DESTINY

Mark Hamill, who played Luke Skywalker in the *Star Wars* saga, is currently enjoying a successful career as an actor – in CD-ROM games. The young Jedi, now quite old, has appeared in *Wing Commander 3*, and played a voice-over part in LucasArts' *Full Throttle*. Will he appear in a future *Star Wars* game? Watch this space...

X-Wing

As if *Rebel Assault 2* weren't enough, LucasArts has finally released a Mac version of the classic *Star Wars* flight sim, *X-Wing*. But are the oldies still the best?

Fancy sharing a bottle of Brown Ale and a cheese and pickle sandwich at lunchtime, luv?

Da da, da-da-da-daaaa-daa, diddy-de-dum. Spot that tune? It's from the most successful series of sci-fi movies ever made – *Star Wars* – and its instant recognisability and game-friendly action is inspiring games left, right and centre.

Let's get one thing straight first: *X-Wing* is an old game. It was first released for the PC way back in early '93, which makes it prehistoric in the game world, and it's taken LucasArts all this time to get around to releasing it on the Mac. With this in mind, LucasArts has tarted the package up, and called it *X-Wing: Collector's CD-ROM*. It includes six brand-new missions and two Tour of Duty extensions – Imperial Pursuit, and B-Wing. But enough of this; what's the game about?

MACFORMAT Classic

Breathe deep

Sigh. It goes like this: you are a trainee pilot with the Rebel Alliance (the good guys) and it's your sworn duty to learn how to fly a variety of spacecraft and use 'em to destroy as many of the Empire (the bad guys) ships as possible. Get the idea?

You start as a lowly Flight Cadet, and must learn how to successfully pilot each of the Rebels' four attack craft: the A-Wing, B-Wing, Y-Wing, and of course, the X-Wing. To start with you are given eight levels of basic training, which involves flying through hoops and shooting dummy targets, the challenge increasing with each level. If you get bored and want some real action, you can skip to the Historical Combat section, which recreates famous battles between the Rebels and the Empire. Here, at least, the targets move about... and they shoot back too.

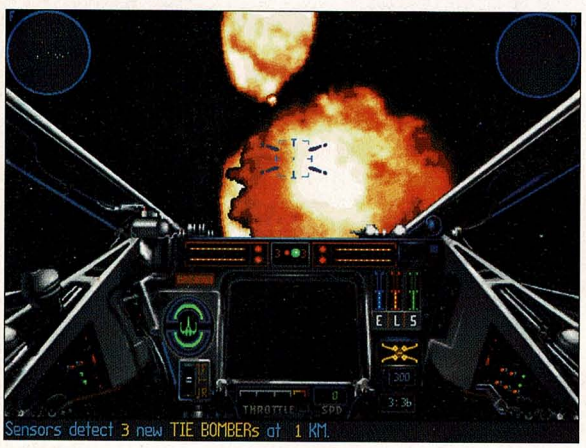
Once you've sussed out the flying, tactics, and Admiral Ackbar's voice, you can progress to the real dogfighting by moving on to the Tour of Duty desk. There are 102 combat missions for you to tackle, and you can play them as often as you like, increasing your score or rank.

Cheesy? Not half!

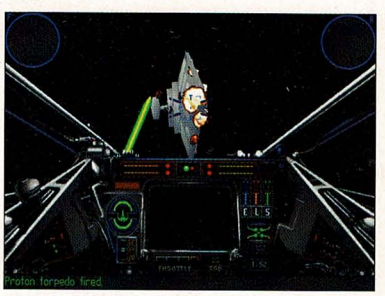
Unlike *Rebel Assault*, *X-Wing* is a real flight sim. You have complete control over your ship's direction, speed, weapons and shields. How you tackle each mission is entirely up to you, but the briefing is good, so pay attention. You're not bound to do the missions in any order either – if you get stuck on one, just move on to the next. The result is a series of games offering a variety of challenges.

The graphics and sound are cheesy compared to *Rebel Assault 2*. But then, this *is* an old game, though it was considered advanced in its time. In terms of gameplay, *X-Wing* is a winner. Each mission has a different objective and there are plenty of missions and spacecraft to choose from.

The only real gripe is the game's minimum requirement of a Quadra or Performa 630. Given the dated graphics, this seems excessive, and it's a shame that LucasArts couldn't have tweaked the game engine to get it to run on older Macs. **LINDSAY BRUCE**



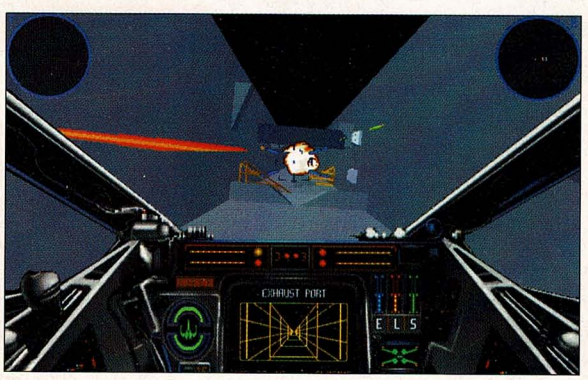
After a heavy day at school or the office, come home and vent your anger on the Empire.



Road Rage the Rebel way. Enjoy blasting those Imperial road hogs out of the sky.

Now remember the sequence... mirror, signal, manoeuvre... fire!

Red sky at night... But red sky in the morning, means I've left the oven on again.



Test your skills and dexterity piloting four different types of spacecraft in the never-ending battle against the dual forces of evil and a cheesy soundtrack.

X-WING

Price: £44.99. **Out:** now.
Requires: Performa 630 or better, System 7.1 or later, 8Mb of RAM (4.5Mb free for game), 256-colour, 13-inch monitor, double-speed CD-ROM drive, and 1Mb of hard disk space.
Contact: Virgin Interactive on 0171 368 2255.

GRAPHICS 72%
Pretty rough by *Rebel Assault's* standards, but good enough to give you a real feeling of atmosphere.

SOUND 75%
The soundtrack sounds like it's being played by a Commodore 64, but the game's sound effects are quite good.

GAMEPLAY 93%
Entertaining and addictive. With so many missions on offer, this game takes a long time to complete – and then you want to start on them all over again.

MACFORMAT RATING 90%

Dino Park Tycoon

A demo of *Dino Park Tycoon* is on the Cover CD – see page 8

What killed off the dinosaurs? A meteor strike, plague, climatic change – or were they just badly managed? Run this Jurassic Park-style simulation and find out.

Dinosaurs, unsuccessful? Rubbish. They lasted well over a hundred million years. Mankind is still only in six figures and, given our track record on environmental matters, we're unlikely to outlast T Rex and co. Balance of nature? Balance of the bank account, more like. Cash is the bottom line, and *Dino Park Tycoon*, a business-sim game, reflects that nicely. You run a Jurassic Park-style zoo, buying dinosaurs, hiring staff and developing sidelines like gift shops. Until, that is, you fail to keep up the payments, and the bank pulls the plug, sending you towards your own personal extinction. As is the nature of such simulation games, you don't 'win'; you judge your own success. You might want to make a million, then sell out or build up the species in the park.

It's a slightly odd mix. The dinosaur element appeals to kids, though you may be uneasy about indoctrinating your offspring – the game is aimed at eight-year-olds upwards – with the belief that money is everything and nature exists purely to serve business. Whether this ruined the moral fibre of the ten-year-old who helped us test the game has yet to be seen.

Having bought your land and dinosaurs, stocked up with feed, and hired your staff, you see an animation of visitors wandering around your park, while a calendar and bank balance show the day-by-day progression of your business. But it can be bewilderingly fast, with notices popping up on screen informing you that your guide has quit and visitors are wandering the park alone, that one of the dinosaurs has escaped, or that your large, scaly inmates are hungry and if you don't get them more feed they'll start snacking on your guests. Going bust – generally within a year or two – is the almost inevitable result; this simulation falls on the tough side of difficult.

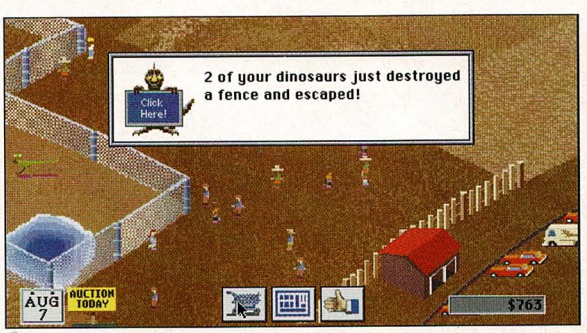
You can see your park in action – the dinos you've bought hop around and look suitably menacing.

The central screen of *Dino Park Tycoon*. Here's where you shop around for employees, dinosaurs, feed and supplies.

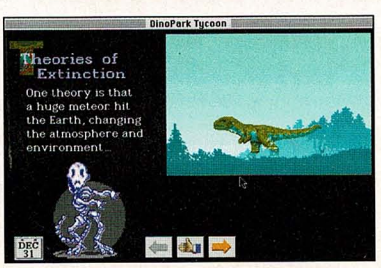
Like all good sims, it's absorbing and fun, and every time you play the game it's different. Yet it's often so hard to keep tabs on what's happening that disasters occur with little warning, making it hard to know how to avoid them in the future. A panel that constantly displays staff morale, dinosaur behaviour, feed levels and so forth, would have helped, enabling you to learn and recognise the tell-tale signs. The feeling of control, of knowing what's going on and why you are succeeding or failing, is the buzz you get from a good sim – and that's distinctly lacking in *Dino Park*.

Dozens of dinosaurs are represented, and interesting facts about them are easily accessed. For example, did you know that the Coelophysis is a desert-dwelling, ten-foot-long meat eater, while down on the plains the Corythosaurus somehow sustains its eight-ton, 33-foot-long body on a vegetarian diet. There's also an 'about-the-dinosaurs' section with perky little animations about theories of extinction, feeding patterns, the environment, and so on. But you can't always access these facts when you need them – such as when you're deciding whether to buy land on the plains or in the swamp, or which dinosaurs or employees you should consider first. A hints-and-tips section would have been useful to get through this.

In the carnivorous world of Mac games, *Dino Park Tycoon* is a bit of a Coelophysis: viable and interesting enough, but no T Rex. Still, it's fun, especially for kids. **Rob Ainsley**



Little disasters like this keep happening. So *that's* why the Allosaurus had a geological hammer and a picture of Rita Hayworth on the wall…


DinoPark Tycoon
Theories of Extinction
One theory is that a huge meteor hit the Earth, changing the atmosphere and environment...
DEC 31

The 'about-the-dinosaurs' section has animated illustrations of the types of dinosaurs, their feeding habits and environments, even various theories about their extinction.

Dino Park Tycoon

Price: £19.95. **Out:** now.
Requires: LC or better, 4Mb of RAM, System 7 or later; 256-colour monitor or better, 5Mb of free hard disk space, CD-ROM drive.
Contact: Iona Software in Ireland on 00 3531 836 6328.

Graphics 64%
Mainly average, but with some entertaining and amusing touches.

Sound 60%
Chunky, fun, but repetitive.

Gameplay 72%
Good modelling, but very easy to lose track of what's going on.

MACFORMAT RATING 65%

Nautiloid but nice

The latest theory on dinosaur extinction (honestly) says that a distant star exploded, sending out neutrons, which gave all the dinosaurs cancer. What this, and every other theory so far, fails to clarify is why certain species were able to survive – the ammonite-like nautiloids, for instance.

Absolute Zero

Ever fancied riding shotgun with a learner driver? Welcome to *Absolute Zero*, a 3D shoot-'em-up with a very dodgy choke and an extremely flat battery.

JOINT VENTURE

Absolute Zero was designed and developed on the Mac and the PC at the same time. The animations were rendered on Silicon Graphics workstations, while the object textures and much of the game code were developed on the Mac.

It's 273 degrees below, and you're down a mine, which is in orbit around Jupiter. One minute you're peacefully swinging your laser axe, and the next you're up to your pit-helmet in mean-looking, bug-eyed aliens. What do you do? You do what all good, bloodthirsty humans do in this situation: you blast the suckers.

So goes it with the characters of *Absolute Zero*, Domark's latest 3D shoot-'em-up. On discovering an alien presence on Europa, they first cannibalise what vehicles they can, and then after dutifully writing their personal logs, checking out their e-mail and scanning the solar newsnet for the latest topical tidbit, they dash off into their 3D landscape to become heroes.

It's a jaunty enough plot. You get to play all the different characters – although in truth, once they're behind the wheel, only their mother could tell them apart – as they fight to restore peace, justice and the NUM to their far out mining colony. You also get to test drive a variety of vehicles – air cars, ground speeders, hoverbikes and big, bad tanks. And guns, lots of guns.

The missions are intelligent, with objectives that mesh well with the overall plot. And there's plenty of chance to strut your macho stuff as you go in low to plant a navigational beacon or smash an ice bridge carrying aliens. You can even capture your own specimen for scientific research.

Absolute Zero also benefits from all the usual options and instrumentation: external views, full targeting facilities, a choice of on-board weapons, switchable radars and altitude and speed meters.

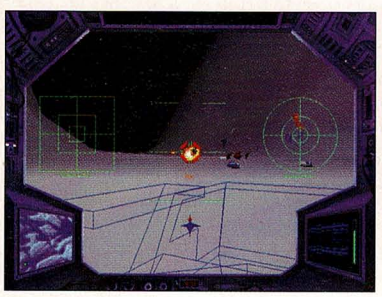
But – and it's a massive but – *Absolute Zero* has one irredeemable flaw: you'll be hard pushed to find a PowerMac capable of running it. It's big. It's hungry. It's a digital nightmare that even Wes Craven couldn't lay to rest – and that's just the programming.

Power drain

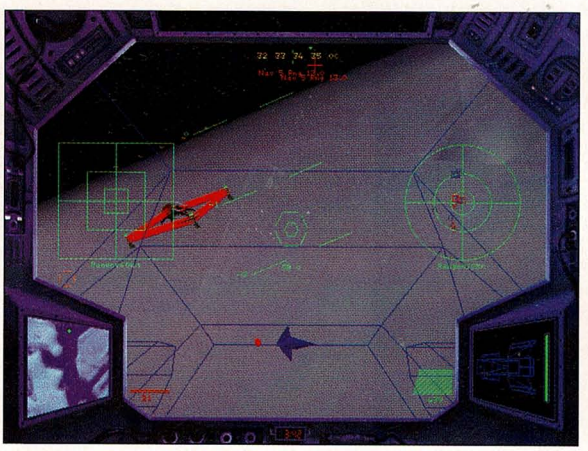
Absolute Zero is not so much a game as a monstrous black hole sucking on your processor. Its system requirements are huge enough to give your average PowerMac a nervous tic, and if you've only got 8Mb of RAM you might as well clamp your lips around the disk drive slot and start giving your Mac the kiss of life now.

A PowerMac 7200/75 with 16Mb of RAM gasps and splutters as it pushes the sprites around the screen – and even then it can't always summon the digital juice to play the sound samples. Double-speed CD-ROMs are similarly stricken as they wheeze their way through program files. And even if you're fortunate enough to have the 350 Mb of free hard disk space this game requires for full installation, it's still likely to have an irritating cough.

The manual suggests various methods for reducing the drain on your system, such as line skipping and switching to a low resolution display. Unfor-



You too can rip apart alien craft in a satisfying mixture of rolling flames and scrap metal. The blue ghost-lines show the outline of your craft.



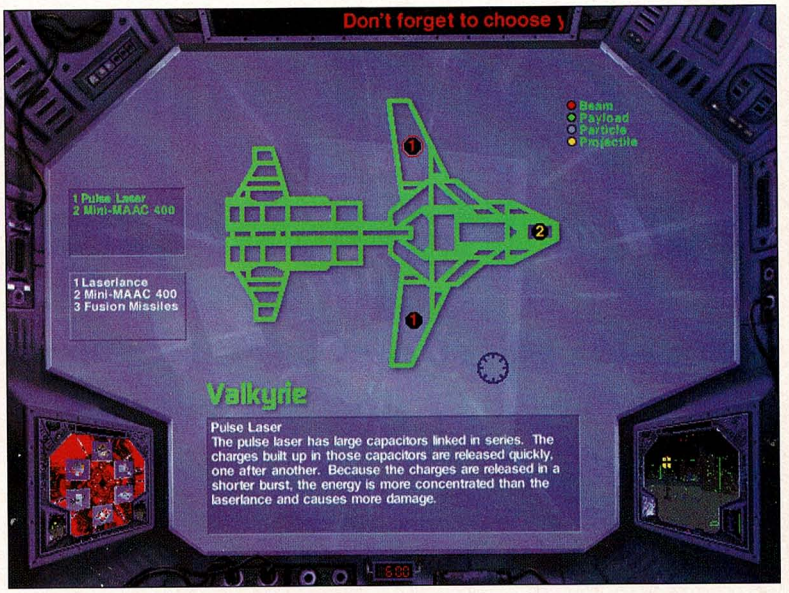
It might look like a big rubber band to you and me, but to the folks on Europa this is the latest in forcefield technology – every ship should have one.

It's really worth juddering to a halt just to see that gloriously detailed mountain scene. What do you mean sarcasm?

The side panels illustrate your view inside the VR helmet that you wear during missions. Taking it off enables you to see more of the scene outside, but leaves you without any instrumentation.

Innocent bystanders: here you have to escort a bus full of hapless refugees to safety before you can carry on the wholesale slaughter of alienkind.

That's you, that is. Yes, that's right, all of them. *Absolute Zero* lets you play all its different characters, complete with barcodes, e-mail accounts and a dodgy propensity for writing personal logs in the middle of a crisis.


Don't forget to choose y
Beam
Payload
Particle
Projectile
1 Pulse Laser
2 Mini-MAAC 400
1 Laserlance
2 Mini-MAAC 400
3 Fusion Missiles
Valkyrie
Pulse Laser
The pulse laser has large capacitors linked in series. The charges built up in those capacitors are released quickly, one after another. Because the charges are released in a shorter burst, the energy is more concentrated than the laserlance and causes more damage.

Before each mission you can customise your vehicles' weapons to suit the assignment. Fluffy dice, anyone?

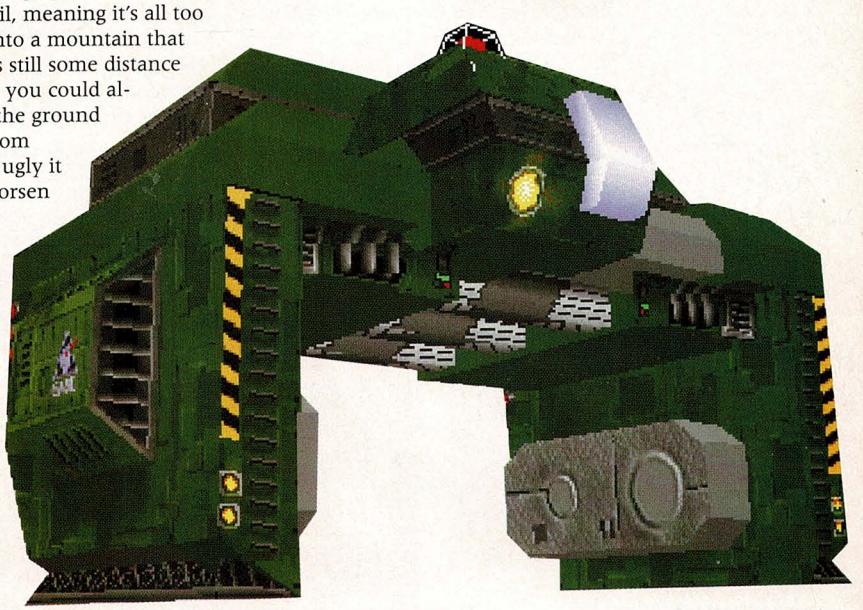
tunately, apart from serving as a garish reminder of your old Commodore 64 games, these methods have little impact on the game itself. Another suggestion for those struggling with the game's gluttonous memory requirements is to install *QuitLaunch* to free up the 500K or so of RAM used by the Finder, but again there's little noticeable difference in the game's speed.

Jerky graphics are the first indication that something is amiss. Forget any ideas you might have about your aircar hugging the terrain with all cannons blazing. *Absolute Zero's* ride is more akin to skateboarding across a rusty cattlegrid with a dehydrated water pistol. The juddery action also puts paid to any ideas of smoothly tracking your enemies as they head in on strafing runs, and if you're unlucky enough to be fighting against a mountain backdrop, the extra graphics freeze your craft in its tracks.

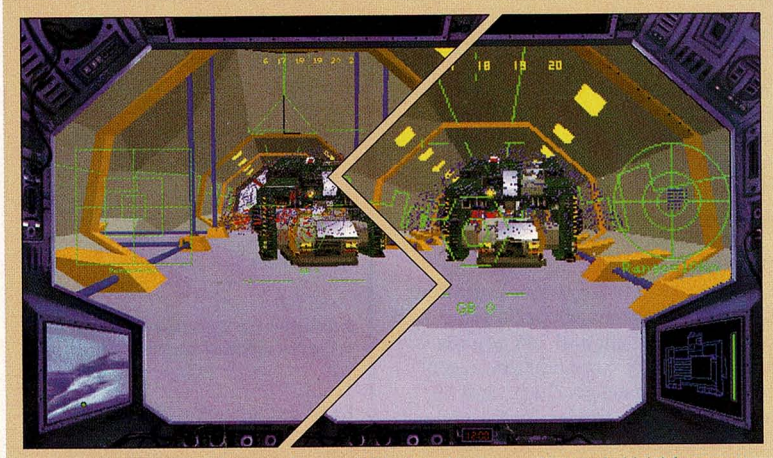
The question is, why? *Marathon* and *Descent* both manage to smoothly render 3D scenes without the migraine-inducing frame rate, so why not *Absolute Zero?* After all, we're not talking about full motion video here – just gouraud shading and polygons. Worse still, the landscape graphics lack any sort of scale detail, meaning it's all too easy to plough into a mountain that you thought was still some distance away. Of course, you could always switch on the ground grid, but apart from being green and ugly it only serves to worsen the slow down problems.

Like *Comanche* last month, *Absolute Zero* has plenty to recommend it – its mission structure, plot and immense variety are features that other game designers would be well-advised to emulate. Unfortunately, though, in a game that's all about targeting a moving enemy, a stop-start game engine is a fatal flaw.

KAREN LEVELL



SPOT THE DIFFERENCE



The manual recommends this super low-resolution, line-skipping graphics mode (right) for anyone who's really struggling with the game's apparently excessive system requirements. Makes you glad you forked out over £2,000 for the PowerMac you've got sat on your desk, doesn't it?

ABSOLUTE ZERO

Price: TBC (probably £44.99). **Out:** April. **Requires:** PowerMac, 8Mb of RAM, 256-colour monitor, double-speed CD officially. You'll probably struggle with anything less than a PowerMac 9500 with 16Mb of RAM. **Contact:** Domark on 0181 780 2224.

GRAPHICS 21%
Jerky, slow and bland. Still, the intro and mission interludes are quite nice.

SOUND 66%
Good effects, but they're often lost in the scramble for processor time.

GAMEPLAY 55%
So near and yet so far. The drain on your system will quickly frustrate even the keenest player.

MACFORMAT RATING 51%

SFPD Homicide: The Body in the Bay

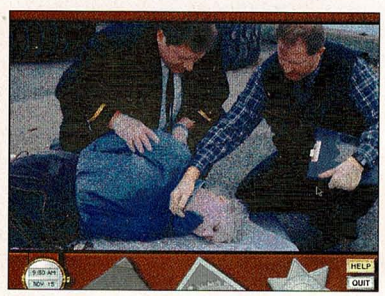
Police work isn't all car chases, beautiful women and gunplay. Apparently, it's about notebooks, forensics and searches. Enter the real the cops, stage left...

From *Starsky and Hutch* to *Miami Vice*, the TV image of American policing is often glamorous and action-packed. The detectives drive fancy cars, churn out witty one-liners, and engage in bouts of male bonding whenever a life or death situation emerges – about every ten minutes.

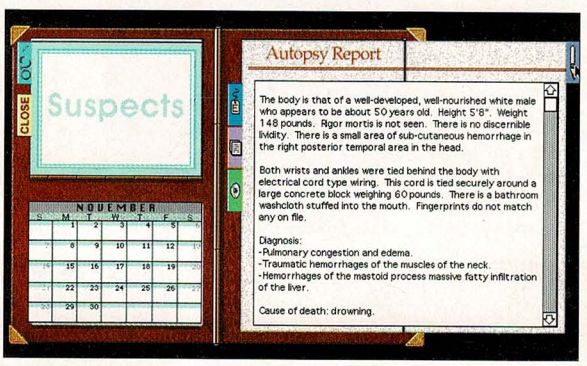
Real-life detective work, the 9-to-5 grind of clue gathering and witness interviewing, recreated in Grolier's *SFPD Homicide*, is another thing entirely. *The Body In The Bay* is a game built around a true-crime police investigation. A man's body has been found, and as the detective assigned to the case you must identify the victim, collect the evidence, locate and arrest a suspect, and then present a sufficiently overwhelming case to the DA, ensuring that the murderer goes down for life. Nothing to it!

The body has been gagged, bound and tied to a lump of concrete. Obviously, he didn't just fall in by accident, and by searching the area for clues and sending the body for an autopsy, you can discover basic information with which to start your investigation. Anything you find is stored in your police file, which becomes a database of information, eventually including witness statements, forensic evidence and a list of potential suspects.

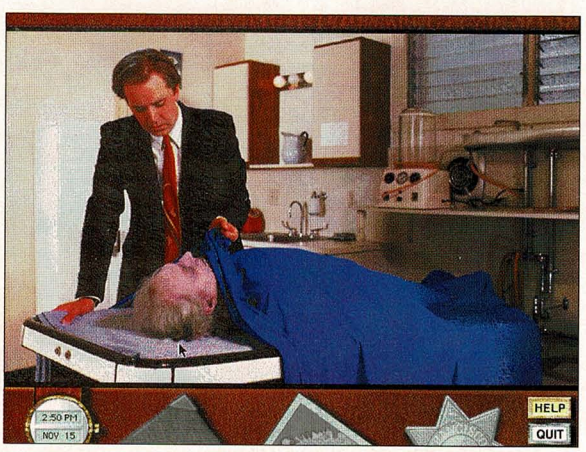
You can gather information in one of two ways: either by interviewing witnesses, or by thoroughly searching for clues with the mouse pointer.



The infamous body in the bay. Who is he? How did he get there? Who in San Francisco killed him?


CLOSE
Suspects
Autopsy Report
NOVEMBER
The body is that of a well-developed, well-nourished white male who appears to be about 50 years old. Height 5'8". Weight 148 pounds. Rigor mortis is not seen. There is no discernible lividity. There is a small area of sub-cutaneous hemorrhage in the right posterior temporal area in the head.
Both wrists and ankles were tied behind the body with electrical cord type wiring. This cord is tied securely around a large concrete block weighing 60 pounds. There is a bathroom washcloth stuffed into the mouth. Fingerprints do not match any on file.
Diagnosis:
-Pulmonary congestion and edema.
-Traumatic hemorrhages of the muscles of the neck.
-Hemorrhages of the mastoid process massive fatty infiltration of the liver.
Cause of death: drowning.

Your case file soon builds up to become an invaluable database of evidence, testimonies and forensic reports.



Having discovered the identity of the victim via a computer search, you can call his son down to the morgue to identify the body.

At the start of the game you don't have much to go on, but when the autopsy report returns, you learn that the man was white, about 50 years old, five-foot-eight and 148 pounds. Using the police computer you can run a missing persons check, and by inviting relatives to identify the body, you can establish the victim's identity and move on to investigating his last known movements.

Rather than testing your hand-eye coordination, *SFPD Homicide* relies on your brain power and observation. You've got to listen to witness testimonies and move the mouse pointer thoroughly over crime scenes, revealing the tiniest of clues. Why did the victim have calls from young women? Who does the lipstick belong to? Does the discovery of a life-insurance policy mean that his son bumped him off to get rich quick? With deduction, legwork and a little luck, the pieces of the jigsaw start to fall into place.

While it's not a really exciting game, *SFPD Homicide* is realistic, and even slightly absorbing. It's a good mix of high-resolution graphics, video clips and photographs, and if the acting is a bit dodgy it's probably because the game was filmed using members of the real San Francisco Police Department. This realism is further enhanced by accurate recreations of the evidence, and by using the locations where the crime originally took place.

It's also neatly presented, with an on-line help facility in the shape of Frank Falzon, the Inspector who worked on the real case. But although *SFPD Homicide* offers hours of forehead-scratching gameplay, it's like a traditional point-and-click adventure: there's an A to B to C way for you to solve the crime, making the replay value non-existent. *SFPD Homicide* is a serious game, an educational and interesting peek into the world of policing. It's unlikely to give you many laughs, but it's big, involving and playable at least once. **DEAN EVANS**

SFPD HOMICIDE

Price: £44.99. **Out:** now.
Requires: LCII or better, 5Mb of RAM, System 7 or later, 256-colour, 13-inch monitor, double-speed CD-ROM drive.
Contact: Grolier on 0181 600 6023.

GRAPHICS 60%
Functional at best. Nothing fancy, and some wooden acting performances don't help matters.

SOUND 50%
A film-noire sax solo opens the game, but otherwise fairly non-existent.

GAMEPLAY 79%
No gunplay, just patient case building and clue gathering. Pedestrian, but curiously absorbing – one time through.

MACFORMAT RATING 76%

Terror TRAX: Track of the Vampire

In the 21st century, vampires stalk the streets of LA. Terror TRAX is responsible for their termination, using crucifixes, garlic cloves and laser-sighted holy water...

Oh dear. After years of producing top-quality encyclopaedias and reference titles, Grolier Interactive has taken the plunge into the games market. Admittedly, the company's *SFPD Homicide* (reviewed opposite) is an absorbing detective game, but *Greg Norman's Golf* deserves to be chucked into the nearest skip, and as for *Terror TRAX* – a game about futuristic vampire hunters – it wouldn't set the gaming world on fire even if you doused it in petrol and chucked a burning match at it.

In fact, *Terror TRAX* isn't even a game. It's billed as an interactive movie, but when you start to play, you soon realise that the interactivity is limited to about 1%, while the movie hogs a whopping 99% of the action. The game, such as it is, boils down to simple A or B decisions. You have no more control over it than to choose between 'shall I go inside the house to

In *Terror TRAX* you view the action through the eyes of the agents, which means lots of wobbly, *Big Breakfast*-style, camera shots.

investigate' or 'shall I stay outside and do a bit of surveillance' when so prompted. It's a bit like one of those old *Fighting Fantasy* novels – turn to page 68 if you want to fight the seven-headed dragon, or page 126 if you want to run away.

As far as the plot is concerned, *Terror TRAX* (which stands for Trace, Research, Analyse, eXterminate) is a covert organisation of modern-day vampire hunters. Anti-vampire measures, however, haven't exactly improved and the TRAX operatives are forced to combat 21st century blood-suckers with 9th century ammunition. Standing in front of a vampire, brandishing a crucifix, and shouting 'Get back, foul spawn of Satan' still seems to work wonders, garlic cloves are 'most excellent for dispatching fang jobs' (so the guys at TRAX say), while your well-equipped operative is also

With its subject matter and tension-building direction, *Terror TRAX* tries to emulate a horror film. But fails.

armed with a laser-sighted pistol that fires capsules of salt and holy water.

As the game begins, you view the action through the eyes of your agents, either via optical implants or a Heads Up Display bolted discreetly onto a pair of fashionable sunglasses. A and B decisions aside, as a movie *Terror TRAX* shows you a thoroughly dark and gloomy world. Viewing the action first-hand means there's a lot of *Big Breakfast*-style camera shots and, on a very basic level, the video footage is trying to emulate a horror flick.

The game's attraction – not that it has a great deal – is that if you play it in a room with all the lights turned off, things can get fairly scary. There's a neat *Fatal Attraction*-style 'You think I'm dead, but I'm not' scene, where you discover a beautiful woman slumped in a bathroom, covered in blood. As you move closer to investigate, the sound gets quieter, the tension rises... before she suddenly moves, bares fangs and tries to give you a fatal lovebite – the cinematic

From A to B and back again – you don't have to make any complex decisions in *Terror Trax* – which makes its gameplay very boring.

The game (what there is of it) is set in a suitably dark and gloomy world.

equivalent of a loud 'boo!' *Terror TRAX* is an extremely silly game, and if you can't take a game seriously in the first five minutes, there's little hope for it. Choose whatever words you like to describe it, as long as they're synonyms for dire, awful and boring.

Grolier has made the classic mistake of thinking that the interactive movie is a growth format, and frankly, everyone's bored with it. Excitement and playability stem from interactivity, and with its tedious A or B plotline, *Terror TRAX* offers none of this. **Dean Evans**

Terror TRAX

Price: £44.99. **Out:** now.
Requires: Quadra or better, 8Mb of RAM, System 7 or later, 13-inch colour monitor, double-speed CD-ROM drive.
Contact: Grolier on 0181 600 6023.

Graphics 75%
No complaints. The movie quality is good and the computer generated graphics are extremely slick.

Sound 60%
Digitised speech galore and a suitably moody soundtrack. Nothing special.

Gameplay 1%
Absolutely none. Nil. Zip. Zilch. Zero. Nada. You are likely to have more fun vacuuming your front room.

MACFORMAT RATING 10%

Asterix: Caesar's Challenge

Does the humour and panache of the cartoon strip transfer to this big-production CD-ROM? Take the magic potion and see if you match up to the Romans...

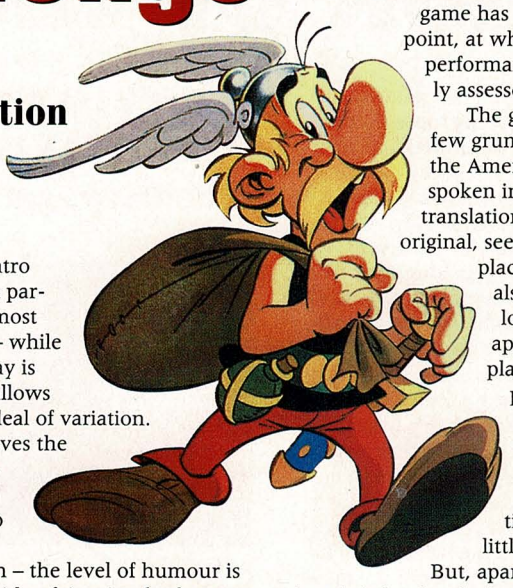
Humour is notoriously hard to translate, but something about Goscinny and Uderzo's quirky cartoon creation has transcended language and cultural barriers. Was it luck or inspiration, for example, that allowed the dog's name – Idéefix – to translate accurately and even more appropriately into English as Dogmatix?

Asterix, Obelix, Getafix and chums certainly do seem to have more than their share of luck. They've been superbly served by this outstanding CD-ROM, the best designed and implemented game of its style to hit the market in a long time. It has bags of style, plenty of humour, and it's great fun to play. The animations are excellent – the intro sequence in particular is almost TV-quality – while the gameplay is simple yet allows for a great deal of variation. It also achieves the rare distinction of appealing to both adults and children – the level of humour is just right, with a fair mix of references the adults will like (for example the Sean-Connery-soundalike character Dubbelosix) coupled with slapstick and silliness for the kids. The packaging specifies the age range as seven years and upwards, but you are likely to find younger kids enjoy it too.

Asterix
CAESAR'S CHALLENGE · LE DÉFI DE CÉSAR · DIE GROSSE REISE · DE UITDAGING VAN CAESAR · LA SFIDA DI CESARE · EL DESAFÍO DE CÉSAR · O DESAFIO DE CESAR

With this map in front of you, showing your progress round the Roman Empire, the Mac takes you into different adventures in every square. If you make it back to your village, you could confound Caesar – that's the challenge.

A great feature of this game is that you can play individually or as a team, with up to four of you playing a selection of characters from Asterix' village. It plays just like a board game – set out the enclosed map in front of you, throw your Roman dice, and work your way round the map, visiting various Roman outposts along the way. Depending on the squares you land on, you might have to take part in a quick arcade-style action game, answer a general knowledge question about the country, pick up various prizes and meet characters ranging from the helpful to the malicious, alongside a multitude of other adventures. The object is to get back to the village with booty from your travels to prove where you've been, thus confounding Caesar's challenge – that challenge being, that the Gauls can't travel round the Empire. Another excellent touch is that you can set not just the level of difficulty of the action games and quiz questions, but also the time you want to spend playing, from 30 minutes to two hours. Every game has a definite end point, at which stage your performance is amusingly assessed.



The game provides few grumbles, although the American accents, spoken in the English translation of a French original, seem badly out of place. You may also question its long-term appeal. After ten plays you may possibly find the novelty of the presentation wearing off and the action becoming a little repetitive. But, apart from that, Asterix is hard to fault. It has all the style, surprise, humour and liveliness of the cartoon, and it's great fun for everyone in the family. Another great triumph for Asterix.

ROB AINSLEY

MACFORMAT Classic

ASTERIX: CHALLENGE

Price: £39.99. **Out:** now.
Requires: LC or better (PowerMac recommended), 2Mb of free RAM, System 7 or later, 256-colour, 12-inch monitor, double-speed CD-ROM drive.
Contact: Infogrames on 0171 738 8199.

GRAPHICS 92%
Brilliant – just like the cartoon.

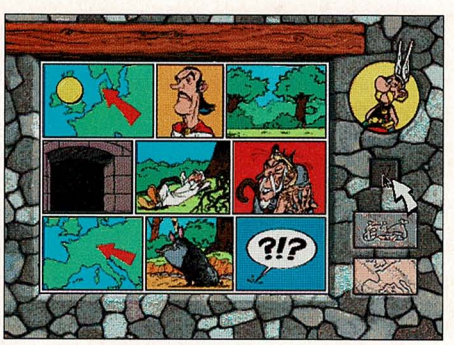
SOUND 92%
Brilliant, apart from the accents.

GAMEPLAY 92%
Brilliant – varied, entertaining and great fun for the whole family.

MACFORMAT RATING 92%

Asterix' opening screen doesn't begin to give you an idea of the superb animations that follow, so the sooner you move on to playing the game the better.

You can decide how long you want to spend playing the game – a very nice touch. You're even reminded to take a break from staring at the screen after you've finished!



Having visited England and picked up a rather nice rugby ball as a prize, Asterix' next nine squares on the big map are shown. Throw the dice and see where you end up...

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■ **Performa 450 4/160,** 14-inch monitor, keyboard, mouse, StyleWriter II, external CD300+, microphone, Apple speaker system 7.5.1, *ClarisWorks 4* and lots of other software – £650. ☎ 0141 959 7937

■ **PowerMac 6100/60 8/250,** Radius Precision Colour Pivot monitor, Global Village Teleport Platinum 28,800bps modem – £1,425. Garth, Coventry ☎ 01203 450766

■ **Performa LC475 8/160,** 14-inch Apple monitor, keyboard and mouse, *ClarisWorks,* one year old, mint condition – sensible offers please. Stephen, Devon ☎ 01626 873709

■ **LC475 4/250,** double-speed CD-ROM, external 120Mb HD, 14-inch monitor – £1,000. Adrian ☎ 01202 304873 (eve), 01202 850948 (day)

■ **Quadra 660AV 16/230** accel to 32MHz, double-speed CD-ROM, System 7.5.1, *ClarisWorks 4* etc. 18 months old, home use – £750. Martin ☎ 0171 372 5452

■ **Apple PC 486,** DX2, 66MHz, PC card, 8Mb of RAM, DOS 6.2 and Windows 95 for PowerMac 6100, five months old – £350. ☎ 01462 815788

■ **PowerMac 6100/60 8/250 CD,** mouse, 14-inch Apple Trinitron monitor, System 7, 12 months old, boxed, with manuals, ideal first Mac – reasonable offers considered. Cambs ☎ 01223 570165 (eve)

■ **Mac Classic** 4Mb of RAM, keyboard, mouse, System 7.5, Quantum external SCSI 500Mb, Quantum 9.6K modem (both with int PSU) – £425 ono, will split. Chris ☎ 01442 871235.

■ **Mac IIfx 8/230,** 13-inch colour monitor, keyboard, mouse, one owner – £700; AudioVision monitor, boxed, warranty – £250. ☎ 01895 621865

■ **Mac IIci 20/105,** 14-inch colour monitor and stand, System 7.5, CD-ROM drive, stereo speakers and keyboard – £695 the lot. Dublin ☎ 00 3531 284 6973

■ **LCIII 8/80,** MultiSync monitor, Calcomp 6603PS colour PostScript printer, modem, *Photoshop, PageMaker* and others. May split – offers. ☎ 01507 601803 (phone/fax)

■ Micronet (SyQuest) **removable disk drive** (44Mb), plus six cartridges, used only once – £220. ☎ 01392 433533

■ Mitsubishi S6600 **dye sublimation colour printer,** as new condition, new price £10,000 – only £3,000 for quick sale. ☎ 01903 821191

■ **Performa 475 8/250,** 14-inch colour monitor, under warranty, quad speed CD-ROM, Keyboard, mouse, loads of software, vgc – £900 ono. Adam ☎ 01256 333253, e-mail **101562.3023 @ compuserve.com**

■ Two **Imagewriter LQ's** for sale. 120 column dot matrix printers, good working order – £150 each. Robin, Herts ☎ 01279 600770 (days)

■ **PowerMac 7100/66 32/250 CD,** perfect condition, extended keyboard, mouse and Kensington mouse, boxed, all manuals, cables, software – £1150. ☎ 0171 7944080, fax 0171 431 1426

■ **Macintosh LCIII 4/80** 25MHz, System 7.1, 14-inch Apple Trinitron colour display, keyboard, mouse, extras, boxed with manuals, excellent condition – £700. Chris, Newcastle ☎ 0191 2850295

■ **LCIII 12/80,** 14-inch Performa Plus colour monitor, keyboard, mouse and software, plus external triple-speed NEC CD-ROM drive – £800. Clive ☎ 0131 4492920

■ **LC475 8/160,** 14-inch Apple Trinitron monitor, CD300 double-speed CD-ROM, extended keyboard, mouse, all cables and software – £850 ono. Steve ☎ 01734 773889 (day), 01895 631854 (eve)

■ **LC 4/80,** colour monitor, keyboard, mouse, System 7 installed, excellent condition – any reasonable offer considered. Also LC 4/40 base unit, GWO (or break). ☎ 01252 517430 (eve)

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USER GROUPS

Need hands-on help with a Mac problem? Want to swap shareware or freeware, or just meet other Mac enthusiasts? Try a user group near you.

■ Midapple, the Mac users' group in the West Midlands. Monthly meetings and a newsletter. Send SAE for information to Midapple, 24 High Street, Wall Heath, Kingswinford, West Midlands, DY6 0HB. (MF36)
■ Brighton Hanover Computer Club for Mac, IBM and Amiga users. Meet fourth Tuesday in every month at the Hanover Centre, 33 Southover Street, 8pm. Contact Colin ☎ 01273 602834. (MF36)
■ The Mac Factory BBS. Specialises in Mac shareware. ☎ 01977 708911 (24hrs). SysOp Mark Evans. (MF37)
■ Massacre Bulletin Board now on-line. Modem speeds up to 14,400 24 hrs. ☎ 0131 447 9199 (MF37)
■ Red Apple Software, the Distribution Group! Non-profit making shareware authors, an established network for old & new programmers. Write to: RAS, Lane End, Oak Tree Lane, Tavistock, Devon PL19 9DA or log on to AppleEye BBS on 01234 822180. Red Apple/PentriSoft in the Computing conferences folder. (MF37)
■ The SE Essex Mac User Group meets in Southend, second Monday of the month at 8pm. Mike Foy ☎ 01702 468062 or e-mail **mac@mikefoy.demon.co.uk** (MF38)
■ A new first class BBS, Xnet UK ☎ 01992 550733. A local number to all London numbers, devoted to all subjects for problems. (MF38)
■ Media Club – the best Portuguese Mac user group. Free on-line help via Telnet International. Please send SAE to Media Apartado 15006-1073, Lisboa, Codex, Portugal. (MF39)
■ Australia Queensland Toowoomra Mac user group. 202 Darling Street, Drayton, Toowoomra, Queensland, Australia 4350 or ☎ 61 076 333383 or fax 61 076 333383 (MF39)
■ Appel Club Eindhoven (ACE), 80 members, informal setup, ten meetings a year, fee Dfl 25/yr. Contact Arie Nagel, Puthof 5, 5655 AM Eindhoven, Netherlands ☎ 040 2523879 or e-mail **a.p.nagel@tm.tue.nl** (MF40)
■ New Mac user group, Helensburgh, Strathclyde. Peter Stevens ☎ 01436 676621 (MF40)
■ Mac User Oxford – non-profit user group and shareware library, seasonal shareware catalogue, small fee for printing etc. SSAE: 30 Sandfield Road, Headington, Oxford, OX3 7RJ. (MF 41)
■ Hampton Court Users Group. Informal group which meets approximately every six weeks to exchange ideas and help each other. ☎ 0181 399 9416 or 0181 940 0673 (MF 42)

Groups are listed here for six issues, then deleted. The code at the end of each entry is the last issue in which it will appear. To renew your entry, send in the coupon from page 130. If your group isn't listed here, send us your details! This list is provided as a free service for amateur, non-profit-making Mac user groups. MACFORMAT does not endorse or recommend any group and cannot be held responsible for any problems you might suffer as a result of contacting any of the groups advertised here.

■ **Mac LC 4/40,** 12-inch colour monitor, keyboard and mouse, System 7.1, light home use – £300. ☎ 0161 286 3056.
■ **Performa 460 4/160,** cracking 33MHz processor, 14-inch monitor, double-speed CD-ROM, 14,400bps modem, loads of software, ready for the Net, will help set up, recently £1250 (receipts, warranties, manuals), sell £1,000 ono. ☎ 0181 552 4874
■ **Centris 610 12/230,** 15-inch Precision Pivot Radius colour monitor, extended keyboard, mouse, CD300+e (external), SCSI cable, may sell separately, excellent condition – £1,100. ☎ 0171 792 0374
■ **Quadra 840AV CD 16/500,** extended keyboard, home use, loaded with software – £1,450; QuePoint – £30; *Cinemania* – £20. All in good condition. Len ☎ 0181 393 9991
■ **Duo 210 laptop 4/80**, plus bag and much software for sale – £425; StyleWriter II printer – £100. Robert, Aberdeen ☎ 01224 635686 (before 8pm)
■ **Quadra 610 8/700,** Performa Plus monitor, CD300e, keyboard – £600; Performa 630 8/350 CD/TV Plus, CPU only – £450. Graham, Bucks ☎ 01628 487936
■ **Quadra 660AV 12/260,** keyboard, monitor, real time video and sound sampling capable, also software for sale – £950 ono. David ☎ 01865 790499
■ **PowerBook 145B 4/80,** System 7.1, in excellent condition, with own case, sell with *ClarisWorks* – make me an offer. Ian ☎ 01494 674349 (eve)
■ **Classic 4/40,** 68030 16MHz accelerator card installed, plus 8Mb of RAM (12 in total), Apple CDSC Plus, System 7.1, keyboard, mouse. All boxed with manuals, cables, original discs and many extras, excellent condition – offers around £650 considered for the lot. ☎ 0151 733 8025
■ **PowerBook Duo 250,** with DuoDock, 12Mb of RAM, 200Mb HD, home use only, excellent condition – £850 ono. ☎ 01206 501810
■ **4Mb RAM** 72-pin SIMM, 2 months old, upgraded my Performa – £85 ono. ☎ 01909 482446 (leave message)
■ Apple **14-inch AV monitor,** as new, hardly used – £180. Hants/Berks ☎ 01734 814484
■ **Apple Performa** 450 4/120, System 7.5.1, boxes, single-speed CD-ROM drive, stereo speakers included, plus extras – £600 ono. Mersey ☎ 0151 733 4599
■ **Performa 630 8/500 CD,** 15-inch MultiScan monitor, one month old, boxed, software, superb condition – £1,100. Ali ☎ 01206 873166 (eve)
■ 100 5.25-inch **high density disks** – £7.50 inc p&p; 100 3.5-inch HD disks – £10 inc p&p. Matthew ☎ 0181 523 8058 (day), 0973 301882 (eve)
■ **Nikon Coolscan** external, mint, boxed, six months old, PC and Mac software, superb scans, neg or slide – offers. Richard, SW London ☎ 0956 288714
■ **Newton 110** with 1Mb and 2Mb cards, modem, mains power supply, case and software, brand new, unwanted gift – £300 ono. Steve ☎ 0831 276031
■ **LC 4/40, System 7,** 12-inch colour monitor, keyboard, mouse, light use – £475; PowerMac 6100/60 16/80 CD, 17-inch MultiScan Trinitron monitor, keyboard, mouse, as new – £1,550. ☎ 01279 508384
■ **Mac IIci 4/230** w/cache accelerator, CPU only – £375 ono; Radius Direct Colour GX 24-bit card – £200 ono; 16Mb of RAM – £250 ono. All as new. Mike ☎ 01337 831172
■ Apple Macintosh **Power CD,** complete and boxed as new – £55. ☎ 01257 272737
■ **PowerMac 7100/66 16/350,** 13-inch, Apple monitor, external CD-ROM, light use, warranty April '96 – £1,600. ☎ 0151 426 6258
■ **Duo 210** parts from scrap Duo. Battery, keyboard, trackball, power supply, manual, System 7.1 disks, SCSI lead – offers. Lancaster/Preston. ☎ 01524 62427 (eve), e-mail **s.r.monk@uclan.ac.uk**
■ **Mac IIsi 5/350,** Apple 14-inch colour monitor, keyboard, mouse, all working – £550 ono. ☎ 01923 823392
■ **LCII 8/80,** FPU, 14-inch Apple monitor, keyboard, mouse, System 7.3, software including *ClarisWorks 4* and much more. Home use only – £750 ono. ☎ 01706 624326
■ **Mac Plus 1Mb,** monitor, keyboard, mouse and some software, good working order, ideal first computer – £95 ono. ☎ 01978 754189
■ **Apple LaserWriter 320** for sale, hardly used, excellent condition – £450 ono. Andy ☎ 01794 514287
■ **Mac Plus,** 1Mb of RAM, 20Mb external hard drive, System 6.0.7, draw, paint, word processor and database software, slight fault to screen – £50. Chris ☎ 01452 780511
■ **Quad-speed CD-ROM drive** and software, as new, replaced by Performa – £145, post included. Malcolm ☎ 01403 752559
■ **External hard drive,** 540Mb Quantum, less than a year old, boxed – £150 ono. ☎ 00 49 5241 37622 (after 5pm weekdays)
■ **8Mb memory card** for 200 series PowerBook Duo, still boxed £180 ono; also 4Mb memory card available – £90 ono; can fit if required. ☎ 01734 752583
■ **LC 10/40,** extended keyboard, mouse, *MacWrite, MacDraw Pro, Delta Graph,* all boxes, manuals, excellent

UK USER GROUPS

The User Group Council provides a list of all the user groups registered with them. If you wish to contact the Council, ask for John McKnight ☎ 0181 314 5555.

Local user groups:

■ Aston University Mac UG, Birmingham area, contact Ray Tier ☎ 0121 359 3611
■ Berkshire Mac UG, Ian Burn ☎ 01734 813669
■ Blackburn Mac UG, Roger Moreton ☎ 01254 670043
■ Bournemouth Mac UG, Barry Cheesman ☎ 01202 615859
■ Bristol (BAUD), Malcolm Ingsley ☎ 01454 616846
■ Cambridge Apple UG, Ian Archibald ☎ 01223 311157
■ Cancer Research/RMH UG, Raymond Henry ☎ 0181 643 8901 ext 4636
■ Edinburgh Apple UG, John Beatie ☎ 0131 554 5096
■ Gateway UG, Norfolk area, Verne Anderson ☎ 01638 513000
■ Glasgow Mac UG, Stephen Broadfoot ☎ 0141 339 6646
■ Hampton Court UG, Sabre Gilmartin ☎ 0181 979 0262
■ Herts/Beds Apple UG, Norah Arnold ☎ 01582 573918
■ Highland Mac UG (HIMUG), Scottish Highlands, Bob Warner ☎ 01463 715322
■ Liverpool Apple UG, Irene Flaxman ☎ 0151 928 4142 or 0151 949 0307
■ London Mac UG, John McKnight ☎ 0181 314 5555
■ Mac Assist, Cardiff and district, Nigel Arrighi ☎ 01222 224682
■ Midapple, West Midlands, William Watson ☎ 01384 277921
■ Midland Mac UG, Worcestershire, Ivan Knezovich ☎ 01299 402631
■ North West Apple C C, George Evans ☎ 01270 583714
■ Nottingham Mac UG, David Nicholson-Cole ☎ 0115 945 5077 or 0115 945 5444
■ Poole Mac UG, Bob Lister ☎ 01202 684441
■ S E Essex Mac UG, Michael Foy ☎ 01702 468062
■ Southampton Mac UG, Clive Marklow ☎ 01703 293453
■ Southern Mac UG, Salisbury area, Roger Ford ☎ 01722 780102
■ Southwest Mac UG, John Elver ☎ 01272 693119
■ Staffordshire Poly Mac UG, Mark Stiles ☎ 01785 52331
■ Sussex UG, Hastings & E Sussex, Garry Nevin ☎ 01424 714110
■ West Midlands UG, Danny Torbica ☎ 01902 336172
■ Yorks & Humberside Mac UG, David Vardy ☎ 01423 358853

Thematic User Groups:

■ BAPC (Printers), Derek House ☎ 01228 513621
■ Christian Mac UG, Paul Wareing ☎ 01789 490153
■ Corel Draw UG, Jill Foster ☎ 01509 415101 or 01509 620442
■ Developers UG, John French ☎ 01895 672654
■ HebreWare, Mendy Scharf ☎ 0181 802 6143
■ Helix UG, John Sandell ☎ 01763 273379
■ Independent School UG, Ian Carter ☎ 01252 512151
■ LAW Mac UG, Charles Christian ☎ 01379 88518
■ Lisa Users Group UK, Sheila Bell ☎ 01367 710453
■ MacBaud ☎ 01685 58027
■ MacLaw, Nicholas McFarlane-Watt ☎ 01865 784777
■ Medical UG, Keith Davey ☎ 01836 348284
■ Microsoft UG, ☎ 01252 834995 – ask for Enquiries
■ Multimedia UG, Richard Hurley ☎ 01273 834588
■ PageMaker UG, David Foster ☎ 01509 415101
■ QUAD Club (QuarkXPress), Philip Caplan ☎ 0181 523 4233
■ School Mac, Gloucestershire, Bill Henley ☎ 01453 825422
■ School Mac UG, Cambridge, Derek Smith ☎ 01945 584146
■ Scottish HyperCard UG, Tim Anderson ☎ 01698 740535
■ Special Needs UG (SNUG), Geoff Hughes ☎ 01744 24608
■ Strata UG, Roger Harris ☎ 01227 369689
■ The British IIGS UG, Peter Stark ☎ 01223 838231
■ Young Mac ☎ 01795 535472

condition – £300. Epping ☎ 01992 575854

SOFTWARE FOR SALE

■ ***Prince of Persia 2,*** boxed, mint condition and *SimLife*, both with original disks and manuals – £25 for both, Sterling acceptable. Ireland ☎ 00 353 21 344464

■ ***Office 4.2.1*** latest version bundle including *Word 6, PowerPoint, Excel & Mail*, perfect condition and all manuals. Full version, not upgrade, can deliver – £149, bargain. Rory ☎ 0181 567 1132

■ ***Theme Park*** for sale, excellent condition, all original disks, manuals and box included – only £20 ono. Send SAE to Gerard, 35 Eleastan Pk, Kilkeel, Co Down, BT34 4DA.

■ ***Populous 2*** for cash or swap for other games. Tom ☎ 01202 318889

■ ***Myst*** CD-ROM, as new, hardly used – £20 exc. postage. David ☎ 01635 48055

■ ***ClarisWorks 4*** and System 7.5 disks, all original with manuals – both £130 inc p&p. ☎ 01472 750594

■ ***Full Throttle,*** *Myst* – £20 each; *Woodstock* CD – £15, *Wolfenstein 3D* – £15. ☎ 0181 968 8680

■ Fractal Design ***Dabbler*** – £40 (Macs, PowerMacs, Windows); *Sketches* – £40 (unregistered); *Macromedia Action* – £40; *Internet Companion* – £15; *Paint Alchemy* – £25; *Underware* – £10; plus others. ☎ 0171 792 0374

■ ***Photoshop 3.0,*** full CD-ROM and disks – £250; *Quark 3.1* – £150; *MacDraw Pro 2.51* with upgrade path to *ClarisDraw* – £50. All boxed in vgc. Lancs ☎ 01695 732565

■ ***Photoshop 2.5.1*** complete with manuals, disks, plus *KPT* – £140; *Painter 3.1* bundle, manuals, disks, original packing – £150 ono. Wilmslow ☎ 01625 530030 (eve)

■ ***Might and Magic 3*** – £12; *Civilization* – £12; *Claris Organiser,* still sealed – £15; all originals. Graham ☎ 01703 786327

■ ***PageMaker 5,*** boxed, with manuals – £150. Jonathan ☎ 0181 870 8622

■ ***Adobe Photoshop,*** unused and unregistered, still wrapped – offers. Mike ☎ 0171 792 3732

■ Games and edutainment CD-ROMs and disks for sale, including ***Shadow-Wraith,*** *Wacky Races* and *Flashback.* Andy ☎ 0151 728 8688

■ Large private collection of Mac software, CDs and books for sale, all originals, some originals – sale/swap. Send SAE for list. 30b Palace Court, London, W2 4HZ.

■ ***Grolier Encyclopedia*** (CD), *Millie's Maths* (FD) and *Kid Desk* (FD), all original with manuals – £40. Grimsby ☎ 01472 750594

■ Avid ***VideoShop GM*** 2.0.3, unused CD-ROM, manual etc – £80 ono or will swap for *RAM Doubler* or *Norton Utilities; SmartSketch* on floppies – £20 ☎ 01482 809836

■ 3D software, ***StudioPro 1.75 Blitz,*** *QuickDraw 3D* native – £450; *MiniCAD 6.0,* unopened, unregistered – £280; *Canvas 3.0* – £25, *Jag 2* – £12; *Morph 1.1* – £10, *SuperCard 2.5* – £60. ☎ 0181 861 6182

■ ***VideoShop,*** *VistaPro, Marathon 2, Power Tools, F/A-18 Hornet, Vector Effect* and many more titles – sell or swap. Christian ☎ 0181 693 5956

■ ***Microsoft Home,*** *Creative Writer,* brand new, unopened, unwanted – £10; also various CDs. ☎ 01225 317402

■ ***Kid Desk*** – £10; *Thinking Things* – £10; *KidsTime* – £5; *KidsMath* – £10; *Earth Quest* – £15; *Story Book Weaver* – £10; *KidCuts* – £10; *KidPix* – £8; *KidPix Companion* – £8; *KidArt* (add-on for *KidPix*) – £8; all boxed with manuals. ☎ 0181 224 6975

■ ***Marathon 2*** – £30; *Dark Forces* – £25; *7th Guest* – £5; magazines and Cover CDs (MACFORMAT, *MacAction* and *The Mac*) – £1.50/£2. Norwich ☎ 01603 451839 or e-mail **u.schutte@uea.ac.uk**

■ ***ClarisWorks 2,*** still boxed and in original wrapping – £45. ☎ 01733 223331

WANTED

■ PowerMac 7100/66 DE or 7100/66 with 14 or 15-inch monitor wanted. Ronnie, Norway ☎ 00 2219 4522 (will come to UK to collect)

■ Performa 6200/75 8/500, quad-speed CD-ROM at least – any price considered. Shahj, London ☎ 0181 443 5213

■ *Word 5.1* keen price for superseded software, would swap for *ClarisWorks 4.* ☎ 01480 432123 (day), 01480 411467 (eve)

■ *MS Office 3.0,* original disks, manuals and documentation. Ralph ☎ 01778 426970

■ Computer software relating to the standard scratch and handicapping scheme for a Mac or where available. Paul ☎ 01531 634319

■ Reno portable CD-ROM, also portable StyleWriter and the *Dead Sea Scrolls* CD. Robert ☎ 01224 635686 (between 6pm and 8pm, no later)

■ Software *Indiana Jones and Fate of Atlantis, Sherlock Holmes Consulting Detective Volume 1* and *2* and *Secrets of Stargate.* Alex ☎ 01691 772311 (after 6pm)

■ *Adobe Illustrator 5.0* or *5.5* for Mac. Graham ☎ 01733 702600 (afternoons)

■ Can anyone write CD-ROMs in the Merseyside/North West area? If you can help, I need you. Andy ☎ 0151 728 8688

■ PowerPrint cable and driver software wanted. Tony ☎ 01253 886723 (eve)

■ *Glider Pro.* Chris ☎ 01305 782090

■ Wanted old Macintosh/Apple 2 magazines (especially MACFORMAT) and cover CD-ROMs or PD/shareware compilations – pay postage and up to 75p for each magazine and 25p to £1.50 for CDs. ☎ 01935 25974

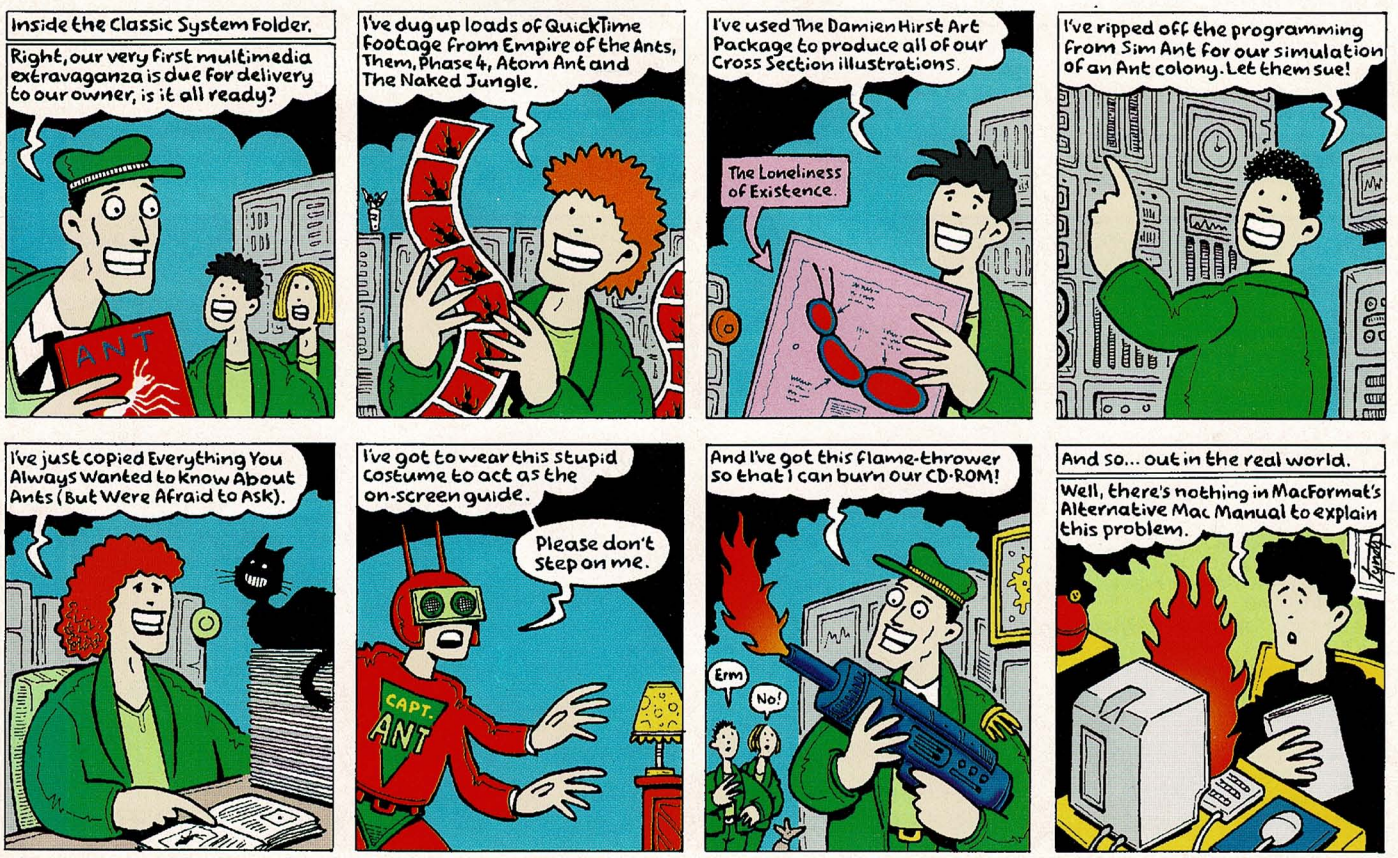
SWAP SHOP

■ StyleWriter II offered for Newton print pack and accessories; Wacom A5 UltraPad offered for Apple AV card, PowerMac SIMMs or 28,800bps fax-modem. ☎ 01409 241944

■ *Adobe Premier 3.0,* original disks etc, swap for font creation software or music creation software for Mac Quadra. ☎ 0171 326 4167

The Classic System Crew

By Bob Lynch


Inside the Classic System Folder.
Right, our very first multimedia extravaganza is due for delivery to our owner, is it all ready?
ANT
I've dug up loads of QuickTime footage from Empire of the Ants, Them, Phase 4, Atom Ant and The Naked Jungle.
I've used The Damien Hirst Art Package to produce all of our Cross Section illustrations.
The Loneliness of Existence.
I've ripped off the programming from Sim Ant for our simulation of an Ant colony. Let them sue!
I've just copied Everything You Always Wanted to Know About Ants (But Were Afraid to Ask).
I've got to wear this stupid costume to act as the on-screen guide.
Please don't step on me.
CAPT. ANT
And I've got this flame-thrower so that I can burn our CD-ROM!
Erm
No!
And so... out in the real world.
Well, there's nothing in MacFormat's Alternative Mac Manual to explain this problem.

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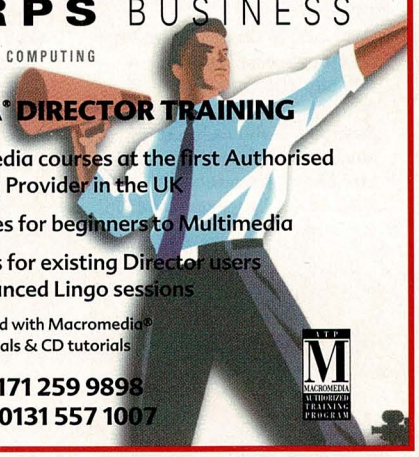

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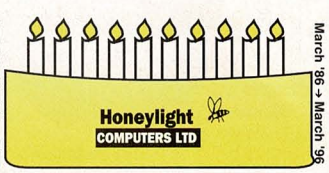

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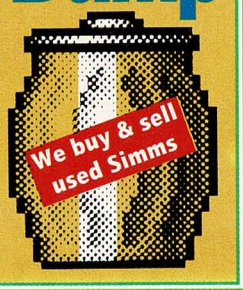

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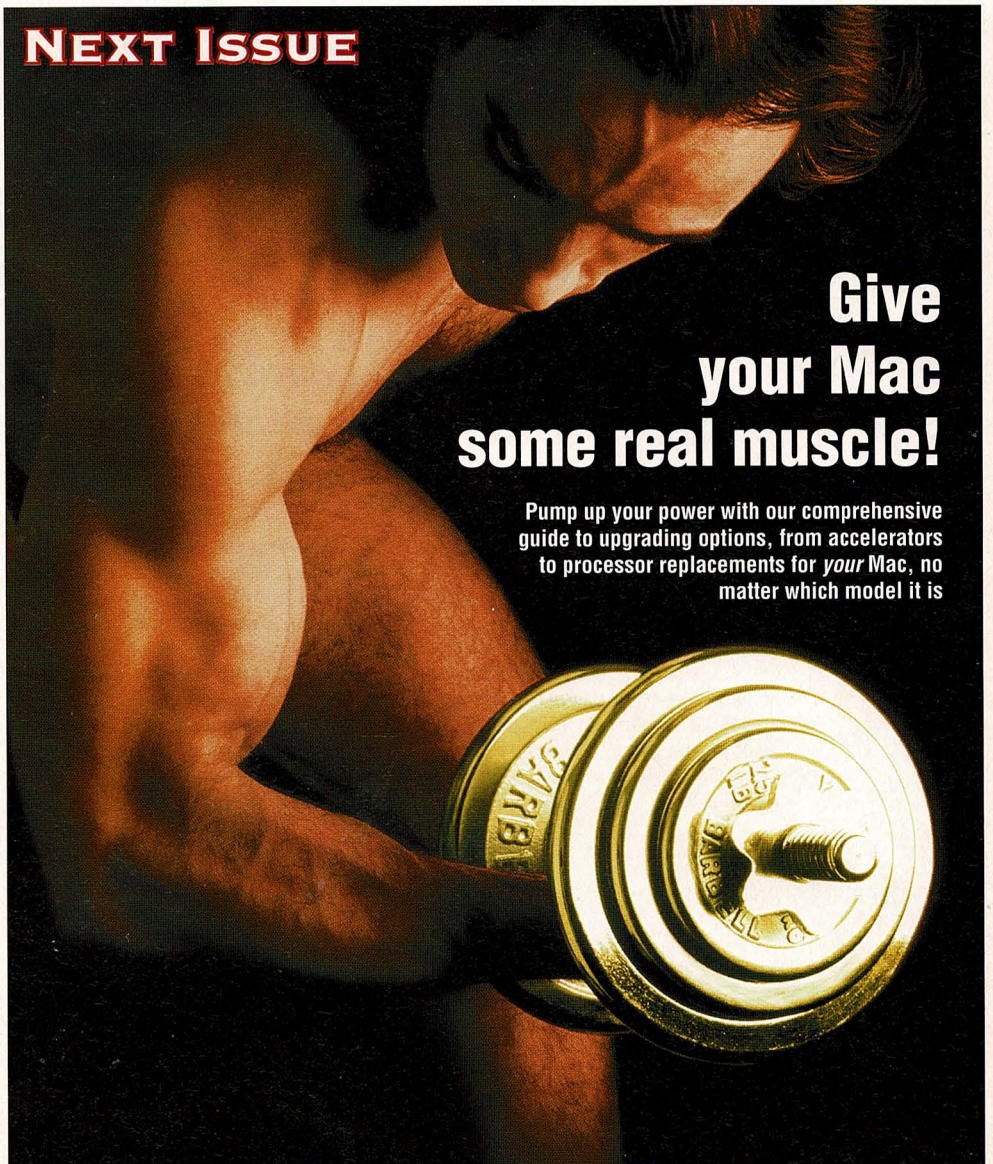
Little things matter – in the Tiny Zone

Hello and welcome again to Tiny Zone, the section of MACFORMAT that's always down to earth. Our Operations Editor *['Made-up job title!', say the team]* has jetted off on a snowboarding holiday. (I think that's like surfing, but on snow. Or is it when you can only afford a plank, not real skis?) In her absence, Jules has been filling her shoes (yes, we thought it was a bit much that she hadn't taken them with her, but it does explain that smell...) – and trying to get to grips with the way she organised her hard disk. It makes you appreciate what an amazingly friendly beast a Mac is. I mean, you really can personalise your workspace, as we'd say if this were the marketing department – not just cosmetically, with nice Desktop patterns or pretty icons, but fundamentally. And that's no small thing, as MACFORMAT reader Michael George from Lancashire points out. A friend of his running Windoze 95 accidentally pulled his *Word 6* folder onto the desktop. No problem on a Mac, but an hour later he still hadn't been able to put it back, and finally had to reinstall it. 'Windows 95 creates at its heart a huge data file containing the location of all programs,' Michael explains, 'and woe to anyone who dares disturb it.' Oddly enough, that's how Frank reacts when anyone moves the windows on *his* Desktop around. And don't *think* of borrowing Alex's mouse...

NEXT ISSUE



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Apple turns 20

Back in April 1976, two young computer buffs named Steve formed Apple. The machines their company created over the next 20 years transformed computing. We look at the Mac's history – with a comprehensive Mac family tree – and ask Apple's top brass what's next

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On the other hand, if you're serious about 'serious' applications... you'll know what we mean when we say that the Mac's leading flat-file database has gone relational. So how does it compare with the rest? We reveal all

PLUS *Adobe Illustrator 6* reviewed ■ The fastest Mac ever made – but it's not by Apple ■ Expert tips for creating textures in your Mac art the easy way ■ *Zoop!* ■ All the latest news and practical how-to's

ARE YOU A WINNER?

Back in MACFORMAT 32, we gave you the chance to win one of five Reno CD-ROM drives from Gasteiner Technologies. The versatile Reno, as well as being a double-speed drive, is also a portable audio CD player you can carry with you wherever you go. The five names drawn from the cardboard box were: Roy Caswell, who apparently lives in a barn in Southrop, Gloucester; P G van Leeuwen of Hoevelaken in Holland; Mr C Packham of Reigate, Surrey; Colin McKinney of Leven, somewhere in Scotland; and Dave Bracken of London N16.

Congratulations, all! Our tie-break question asked what 'Gasteiner' means. Lots of entries said it's to do with the Gastein valley in Austria. Some added that it may be connected with a guest, or customer, possibly 'guest stone' – or even 'stoned guests'. Others said it means 'a long-established company selling a wide range of hardware,' etc, etc. One entrant wrote, 'Hey, wait a minute, it says here "three simple questions"!' But Dave Bracken takes the cake with 'Gasteiner comes from Gas-stein-er, a German earthenware beer mug for holding gassy beer.'

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3. What software is included in the MicroNet MCD Plus bundle?
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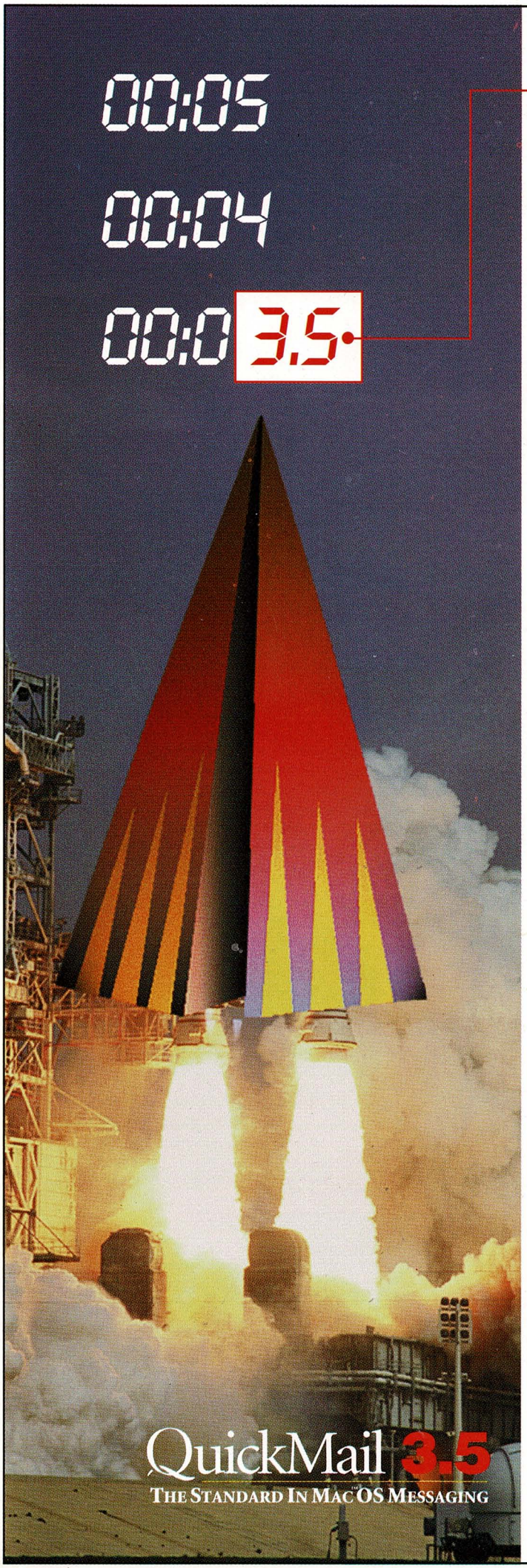
(b) *Toast* and *Jam*
(c) *Fish* and *Chips*

Easy, right? If you need any help, take a tip from us and try turning to this issue's CD writers feature, starting on page 83. Then send your answers on a postcard or the back of a sealed envelope (not forgetting your name and address!) to: 'Wrap me in the MicroNet' Compo, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.



LAUNCH

QuickMail 3.5 Takes Flight!

With the release of QuickMail 3.5, CE Software has once again set a new standard in E-mail power, functionality, and ease of use.

New in QuickMail™ 3.5...

Drag & Drop Functionality
Handling electronic mail has never been easier! Simply "drag," then "drop" E-mail messages on the button bar or in the appropriate file folder to perform the desired action.

Cross-Platform Stylised Text
To add personality or style to any message, text can be customised by font, size, or colour. Stylised text flows seamlessly between Macintosh™ and Windows clients.

Server-Based MailManager
Now QuickMail users can automate mail management even when disconnected from the network. QuickMail 3.5 has added server-based rules to its client-based rule capabilities.

New QuickConference
Included with QuickMail 3.5 as a standalone application, the all-new QuickConference™ is the perfect collaborative tool for all-day brainstorming and virtual meetings. It will even run in the desktop "background"!

Administrative Enhancements
QuickMail 3.5 includes a more robust security module that allows the administrator to set parameters around password usage. There are also new utilities that aid in conserving available storage space on the QuickMail server.

FREE Internet Connectivity
QuickMail 3.5 now includes a 10-user non-stackable Intercall™ Internet UUCP (Unix to Unix Copy Protocol) gateway. Now connect QuickMail users to the information superhighway, to send and receive Internet E-mail. An unlimited user UUCP or SMTP* version is also available.

Over 150 Bridges & Gateways
QuickMail has a wide range of connectivity options to allow users to send and receive messages to and from online services, such as CompuServe™ and America OnLine, and to receive other E-mail systems like MCI Mail™, Sprint, GENie™, and more.

*Simple Mail Transfer Protocol

Launch Into A New World Of E-mail Communications Today!

CE SOFTWARE™

Call One Of The Resellers Listed Below For QuickMail 3.5 Pricing And Upgrade Information

Attention: Macintosh Lotus cc:Mail users and Microsoft Mail users — switch to QuickMail today with the competitive upgrade.

Avel Computers	**Truro, Cornwall**	**01872 262236**
Camelot	**London**	**0171 724 6466**
ICM Computer Group	**West Yorkshire**	**0800 614581**
MacLine	**Carshalton, Surrey**	**0181 401 1111**
MacWarehouse	**Watford**	**0800 181332**
MacZone	**Ripley, Surrey**	**01483 211456**

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OVER 7,500 FILES! OVER 1,200 MEGABYTES!

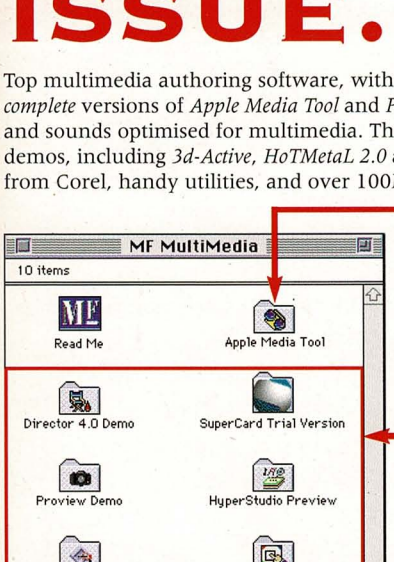
MACFORMAT

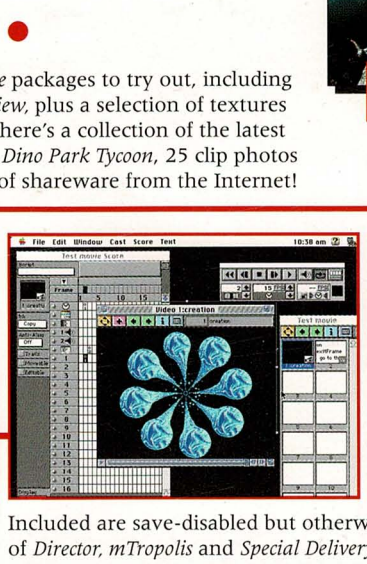
ON THE CDs THIS ISSUE...

Top multimedia authoring software, with *nine* packages to try out, including *complete* versions of *Apple Media Tool* and *ProView*, plus a selection of textures and sounds optimised for multimedia. Then there's a collection of the latest demos, including *3d-Active*, *HoTMetaL 2.0* and *Dino Park Tycoon*, 25 clip photos from Corel, handy utilities, and over 100Mb of shareware from the Internet!

CD-ROM ONE

CD-ROM Two



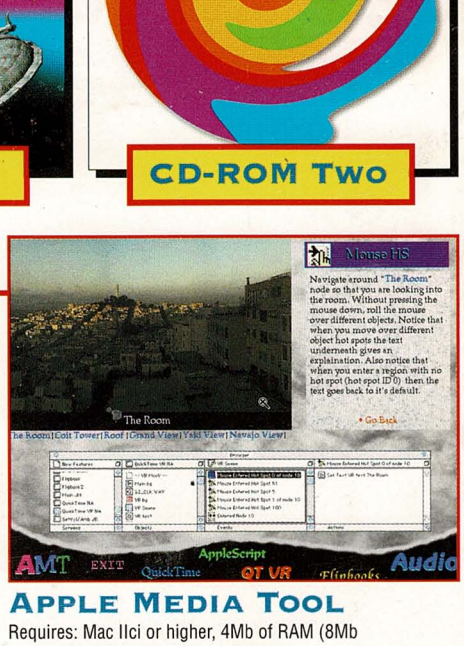


MULTIMEDIA AUTHORING DEMOS

- Director 4.0.4
- ProView
- HyperStudio
- SuperCard
- Astound 2
- mTropolis
- Special Delivery 2.1.1
- The Digital Chisel

Requires: See individual Read Me files – most need an LC or better, 4Mb RAM, System 7.0.

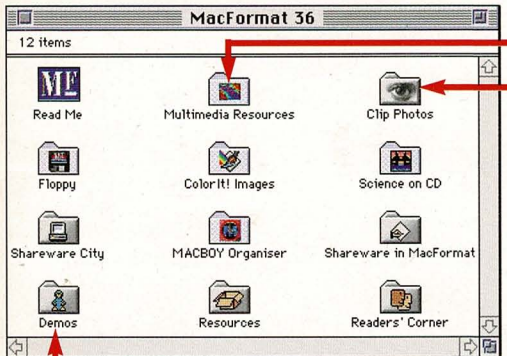
Included are save-disabled but otherwise fully working demos of *Director*, *mTropolis* and *Special Delivery*. Our version of *ProView* is fully working, *not* save-disabled, but you do need the *ProView* program to run your projects. The demo of *HyperStudio* allows you to save projects of up to four cards, but you can't re-save existing projects you open. *SuperCard*, also card-based, gives you 30 days to try all the features, including save. You also have 30 days to try *Astound*, but this version won't create standalones. This *Digital Chisel* demo produces card based projects which you can save and run up to three times.



APPLE MEDIA TOOL

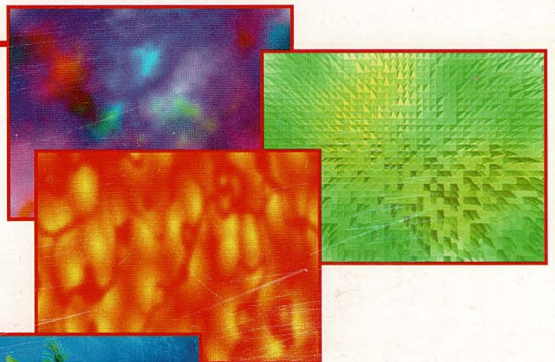
Requires: Mac IIci or higher, 4Mb of RAM (8Mb recommended), System 7.1 or later

Apple's own multimedia authoring program. With its simple drag and drop interface, *AMT* makes it easy to get creative. This version is fully-featured and *not* save-disabled – the only restriction is that you cannot create standalone files. You must have this *Apple Media Tool* program with your productions to play them.



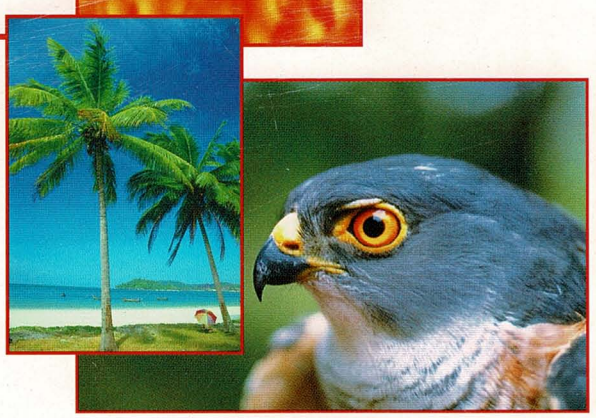
MULTIMEDIA RESOURCES

Exclusively created for the MACFORMAT CD, 21 textures ready to use in your own multimedia. They're in indexed colours and in full-screen (640 x 480) resolution, using as little memory as possible to fill the screen. Plus there's a selection of royalty-free sound files.



DEMOS

A stunning collection of usable demos:
F/A-18 2.0: A new version of the top-quality flight sim. Requires Quadra 840 or PowerMac.
DinoPark Tycoon: Dinosaur park management simulator for kids and budding impresarios.
AmoebArena: Futuristic tactical board game.
3d-Active: Stunning 3D clip art you can view – and even one complete model to export.
Specular TextureScape: Texture and background design at the click of a button.
HoTMetaL 2.0: Web page creation made easy.
The Dorling Kindersley Encyclopedia of Nature: A rolling demo of the new multimedia reference book.



CLIP PHOTOS

25 sample high-res images from Corel's *Photo Library 2* for you to use in your presentations and artwork.